## SILVER PEAK

## NEVER A GHOST TOWN

**By VICTORIA FORD** 

## Silver Peak: Never a Ghost Town

Interviewee: Twenty-three people with firsthand memories of Silver Peak, Nevad Interviewed: 1996 Published: 2002 Interviewer: Victoria Ford UNOHP Catalog #192

### Description

This is the story of Silver Peak, a small mining community in Esmeralda County, Nevada. As with many towns tied to mining, it has suffered the booms and busts that are inherent in the industry, but the difference with Silver Peak is that it has weathered them all and stood its ground in the desert.

Approaches to studying history vary, and one of the most exciting aspects of this book is its use of sources archaeological discoveries, archival records, and oral history interviews. This unique combination offers something more than a list of events, names, and dates. Information on Silver Peak's earliest history was drawn from newspapers, legal documents, letters, business files, and archaeological reports. More recent history, from the 1930s onward, really comes alive through the oral histories that were conducted for this project. Chroniclers recounted not only the serious business of mining and keeping a town afloat but also humorous stories about community life at the place they fondly referred to as "The Peak."

This combination of sources provides a vast array of information on Silver Peak and addresses some of the following questions: Why did Silver Peak survive when other Nevada mining towns did not? What role was played by investors, individuals, families, and advances in technology? How was Silver Peak alike or different from other mining communities? The resulting story is told in this engaging look at a community that has met its challenges head on and has remained vibrant—and never a ghost town.

The Silver Peak oral history project was sponsored by Mineral Ridge Resources, Inc. (MRRI) in cooperation with the Bureau of Land Management and the Nevada State Historic Preservation Office. The project was part of MRRI's permitting process before open-pit mining operations started in 1996 at the sites of the historic Mary, Drinkwater, Oromonte, and Gordon-Brodie mines. Two publications have resulted from this project: a research volume containing the oral histories that was published by the UNOHP in 2000, entitled *Silver Peak: At Work, At Play, and At Home*, and this book, *Silver Peak: Never a Ghost Town*.

## Silver Peak

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## Preface

Approaches to studying history vary, and one of the most exciting aspects of this book on Silver Peak, Nevada, is its combination of sources archaeological discoveries, archival records, and oral history interviews. This unique combination offers something more than a list of events, names, and dates. For Silver Peak's earliest history, we relied on newspapers, legal documents, letters, and business files. Archaeology added information not found in documents—what work took place in particular buildings, where the buildings were located, and who might have been there, such as women or people from different cultures. More recent history, from the 1930s onward, really comes alive in oral histories. With all sources combined, we can look at Silver Peak, Nevada, and find answers to questions. Why did it survive when other Nevada mining towns did not? What role was played by mining, milling, advances in technology, investors, individuals, families? How was Silver Peak alike or different from other mining communities? What we found is the story in this book.

The Silver Peak oral history project was sponsored by Mineral Ridge Resources, Inc. (MRRI) in cooperation with the Bureau of Land Management (BLM) and the Nevada State Historic Preservation Office. The project was part of MRRI's permitting process before open-pit mining operations started in 1996 at the sites of the historic Mary, Drinkwater, Oromonte, and Gordon-Brodie mines.

Even before the MRRI mine opened, oral history interviews were conducted with a total of twenty-three chroniclers during the summer of 1996. The interviews resulted in over 40 hours of audio tapes and more than 1,600 pages of transcription. Chroniclers were selected who could provide firsthand information on mining and milling technology, transportation and housing, and on the community of Silver Peak. Some also told folklore stories that were passed down from generation to generation. As with all such stories, people remembered different details, but the core of their stories was the same. For example, Silver Peak's history would never be complete without its stories of moving the schoolhouse into town, lighting the volcano, and initiating newcomers.

Each chronicler commented that Silver Peak was a special place for them. Of course, some still live there, so it is home. However, even those who came expecting little from the community and those who have gone on to other jobs all clearly remembered their time at "The Peak"—a term local residents use with fondness. All those interviewed were enthusiastic about adding their stories to this project.

The original oral history tapes were donated by MRRI to the University of Nevada Oral History Program (UNOHP) and are archived on the University of Nevada, Reno campus. Two publications have resulted, a research volume and this book. Copies of the lightly edited research volume, published by UNOHP in 2000, were placed in the university libraries at Reno and Las Vegas, the Silver Peak and Tonopah libraries, and the Central Nevada Museum at Tonopah. The book is being sold at several locations, and MRRI is donating proceeds to the Central Nevada Museum, the Silver Peak Library, and UNOHP. The Silver Peak project also inspired and became part of UNOHP's statewide mining oral history project.

Each of the Silver Peak oral histories contained gems of information about the town and Mineral Ridge Mining District's history. However, when in print, oral discourse lacks the gestures, inflection, tone, and other nuances that make normal conversation lively and understandable. As much as possible, I have kept each person's original words, then edited the original transcripts for chronological and topical order so that their stories shine through. I have also used some oral history devices to represent the dynamic elements of spoken language: [laughter] appears when the chronicler laughs in amusement or to express irony. Otherwise bracketed information contains editor's comments to help clarify a spoken passage. Ellipses (...), which are normally used to indicate deleted material, in this book are used to show that a statement is made with pauses, either for emotional or dramatic effect.

Each person interviewed has reviewed the finished manuscript of his or her oral history and has affirmed its accuracy. However, as with all oral histories, memory is imperfect, and the recollections may not be free of error.

In addition to thanking each person I interviewed, I would like to thank Charles Zeier (formerly of Resource Concepts and now with Harding ESE in Carson City, Nevada) for inviting me to join this project; Hank Lesinski, Tom Rinaldi, and Ben Viljoen from MRRI for their support; Anthropology Professor Don Hardesty from the University of Nevada, Reno, Edward J. Stoner of Western Cultural Resources Management, and Renee Corona Kolvet, formerly of Western Cultural Resources Management) for their exciting archaeological contributions to Silver Peak's history; historian Steven

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Mehls for his archival research; and Director Tom King, Assistant Director Mary Larson, Kathleen Coles, Linda Sommer, and Kathryn Wright-Ross at the UNOHP for transcribing, designing, and publishing this book.

Victoria Ford University of Nevada Oral History Program ix

Preface

## Introduction

In 1995, Mineral Ridge Resources, Inc. proposed to reopen a mine near Silver Peak, a small town located at the center of Esmeralda County in southcentral Nevada. Much of the land on which they proposed to conduct operations is administered by the Bureau of Land Management (BLM). In compliance with agency permitting requirements, the mining company conducted a number of studies to ensure that their operation would not harm the area or its resources. One such study was a review of the area's archaeological and historical resources. Gold and silver were discovered in the Mineral Ridge area in the 1860s, and mining has occurred there off and on ever since. Enthusiastic about the area's history, Mineral Ridge Resources wanted results of that review made available to a wide audience. In cooperation with the BLM and the Nevada State Office of Historic Preservation, the mining company proposed an alternate approach to meeting its compliance responsibilities. This book is a result of that approach.

The recording of history can be accomplished using a variety of methods. I am reminded of that every time I stand in front of my bookcase. There are the classic histories, those that result from the review and analysis of written records. Typically, the emphasis is on historic events, processes, or persons of the near or distant past. These are the history books with which we are most familiar. Increasingly over the last half century, archaeology has turned its eye to exploring the historic period. The application of archaeological techniques is especially meaningful in the desert west, where many events occurred between visits of the census taker and generally beyond the reach of the record taker. More recently, there has been an increased interest in the recording of oral histories, memoirs of those who participated in recent history.

The alternate approach proposed by Mineral Ridge Resources was to combine results of these three alternate approaches to the recording of history. Archival and archaeological research results were integrated with the oral histories of people who lived and worked at Silver Peak and its mines. Oral histories, like historical diaries, hold a certain fascination in that they report on the making of history by those who were there. My favorite is the diary of a German conscript who served with Napoleon during the ill-fated march to Moscow. My great-great-great grandfather also made that march but did not survive to write a diary. To me, the beauty of that little book is that it teaches something of both the context and the participants in a specific chapter of history. It is both pertinent and poignant. It is that combination that this volume seeks to capture. It offers a factual presentation of the history of the Silver Peak Mining District as seen through the eyes of the historian, the archaeologist, and some of the people who helped make that history.

Charles D. Zeier, RPA Cultural Resource Specialist

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Introduction

PART I Early History, 1863-1928

## 1 Early Entrepreneurs, 1863-1906

Through the years many a miner arrived in Silver Peak thinking this was just another mining town, just another job out in the godforsaken desert, a two-year, or maybe just a two-day, hitch before moving on to the next job, the next small town, and the next . . . until they all blended into one generic memory called "Nevada mining towns." But what was it about this particular town, sitting in the middle of a vast, silent land, that lured miners and their families and then never entirely released its hold on them?

Known for its minerals—gold, silver, and lithium—Mineral Ridge District mines have proven among Nevada's most productive. By the time World War II arrived and the October 1942 War Production Board Order L-208 suspended nearly all mining of precious metals, Mineral Ridge was one of Nevada's top thirteen producers, yielding more than \$10 million in riches. It ranked along with Virginia City, Eureka, Aurora, Goldfield, and Tonopah.<sup>1</sup> One of the oldest, continuously active districts in the state, Mineral Ridge mines produced more gold and silver than some of Nevada's legendary ghost towns, yet Silver Peak never gained the fame that settled upon the other rip-roaring mining camps. Why? And why did Silver Peak survive when other mining camps did not?

Clues to these questions begin appearing as you drive into town past the unexpected, black cinder cone jutting out at the base of the foothills, a startling leftover from an infant volcano. A cool lake turns out to be nothing more than a beckoning desert mirage, the shimmering welcome of hot summer sun on the salt flats of the Clayton Valley playa. Here and there, the trained eye can spot old tailings from early stamp mills fanning out near the edge of the playa. The nature of the gold and silver, the location, and the innovations necessary to extract them from the ore determined part of the story. Unlike California's placer mines or the Comstock Lode at Virginia City, Silver Peak's ore was different. It challenged early-day miners to stretch their ingenuity and learn the latest in technology, drawing them from hardrock surface mines to deep underground mines then back again to open pits on the surface. The design of mills changed from traditional stamp mills to experiments with the new cyanide and later the heap-leach processes. Today, chemical "mining" of lithium has been added to Silver Peak's resources.

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But landscape alone cannot tell Silver Peak's story. Right at the edge of town residents advertise their devotion to "The Peak." A sign on one modular home announces, "A Virtual Paradise." To newcomers, that may seem a satirical comment on the dry desert climate or a take-off on computerese. But to those autonomous souls who live and work there, the sign is just plain common sense. Talk to the town's inhabitants at the Dew Drop Inn (the only cafe/bar/quick-stop-grocery-store open in the summer of 1996), and each will tell you a different version about what makes Silver Peak special.

Today, few recall the oldest stories that began with Silver Peak's magnetic attraction to East Coast dollars. Among its investors were Samuel J. Tilden, prominent politician who became Governor of New York State (1875-1876) and a presidential candidate in 1876; John I. Blair, wealthy banker and railroad financier from New Jersey; and E. L. Cord, famous for automobile manufacturing. Each willingly offered his money, sinking cash into state-of-the-art machinery designed to extract precious metals from the Mineral Ridge Mining District's hard rock.<sup>2</sup> They joined forces with locally famous miners who offered their talent and toil, and whose names are still familiar in the area—names like Chiatovich, Hill, Humphrey, Shirley, and Vollmar. At some point, each ventured past that black volcano cone and into Silver Peak's mining history.

Finally, the story is completed by a few tenacious families whose descendants store treasured memories of how, over the decades, they kept Silver Peak from becoming just another Nevada ghost town. Silver Peak's real-life stories are alive, stories that create a picture of the boom-and-bust roller-coaster ride of the past 135 years, a ride that has not yet ended. Retired schoolteacher Alberta Merritt, who still lives at Silver Peak and has for 40 years, summed it up best in her oral history, "I want that put on my gravestone .... 'Here lies Alberta. She was just going to be here temporarily."

Silver Peak completes a geographical triangle with Tonopah and Goldfield. To drive there, take the stretch of U.S. Highway 95 from either Hawthorne to the north or Tonopah to the northeast. It intersects Nevada State Highway 285. Locals often call this point the Blair Junction, because the Tonopah and Goldfield Railroad once connected with the short-line Silver Peak Railroad and carried staples into the company town of Blair, which was located three miles north of Silver Peak. Follow Highway 285 to the end of the pavement—that's Silver Peak. Mineral Ridge Mining District is located northwest of town. Access is a steep, winding, gravel road which passes the location of many of the old mining claims mentioned in this book.

The gravel road loops back to the south end of Silver Peak, branches into Fish Lake Valley to the west, or continues south to Lida.

#### THE MINERS

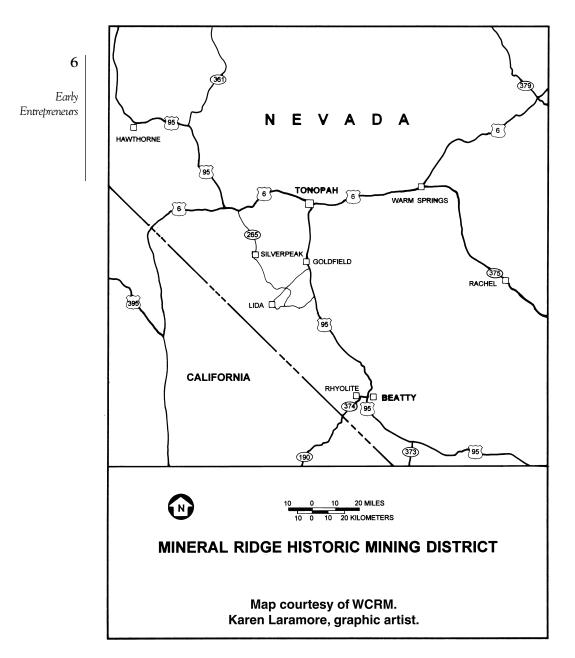
Old-timers always said Mexican prospectors were the first to discover Silver Peak, Nevada, and related evidence suggests that may be true. The Candelaria District just 50 miles to the north was discovered by Mexican miners in 1864, just about the time Silver Peak was incorporated as a town. Church bells cast in Mexico have been uncovered east of Walker Lake, Nevada, not far away.<sup>3</sup> And John Chiatovich, who was one of Silver Peak's earliest known settlers, told his son Cecil he always believed Mexican miners had searched the area as early as the 1850s.

Whoever arrived first had to tolerate plenty of solitude in this vast desert, silent except for the song of a few birds, the scuttle of a lizard scrambling under a sagebrush, and the clank of a pick against hard rock. They must have believed the 1859 Comstock Lode wasn't the only rich strike to be found in Nevada. That faith proved true when discoveries in the Esmeralda District one year later expanded Aurora's population to 5,000 within two years. Next the Reese River District was discovered in 1862 by William Talcott, and the town of Austin appeared almost overnight. To dream of a rich discovery and life on easy street was no stretch of the imagination during such exciting times.

The first prospectors of record in the Silver Peak area arrived sometime in 1863 or 1864 from nearby mining camps such as Aurora and Belmont, just 70 miles away, and Austin, which is 130 miles to the north. They found Silver Peak's spring seeping from a limestone butte, bringing the water so vital to sustain life and run the mills. That spring became the townsite.

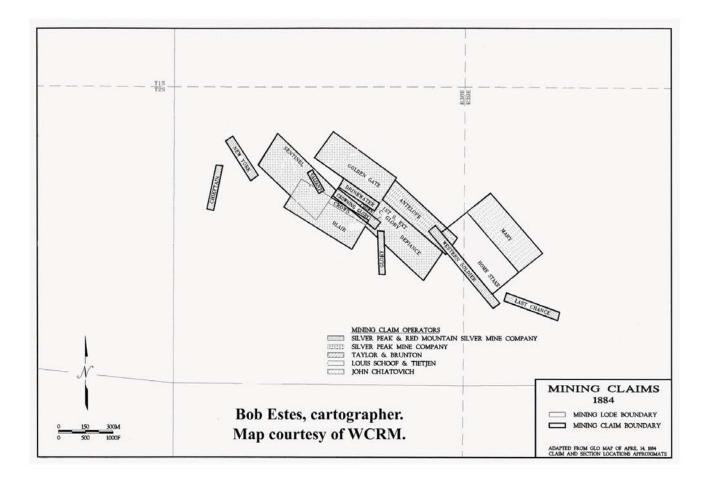
They also found promise—the promise of silver in the Vanderbilt and Pocotillo mines and gold in the Glory and the Drinkwater mines. Claims were filed on seven locations during that first year between July 27, 1864, and August, 1865, and Silver Peak seemed destined for fame and fortune.

Oddly enough, these were perilous years for the mining industry. As Nevada entered statehood on October 31, 1864, its mining industry was threatened. Stocks for mining companies throughout Nevada crashed due to a stock-market panic in San Francisco. In the summer of 1864, the *Reese River Reveille* newspaper reported a depression in the mining camps surrounding Austin. Perhaps the depressed economy at Austin drove the first prospectors to search in what was then called the Red Mountain Mining District near Silver Peak. For example, according to the *Mining and Scientific Press* (June 1, 1867), the Robinson brothers had traveled there searching for salt needed by the mills in Austin when they discovered the Vanderbilt lode and brought back a sample of float quartz that yielded \$180 per ton. Their 5



claim was recorded on April 14, 1865. It was not unusual to find brothers working as partners, and during the same year Seymour and Rienzi Hughes staked the first claims at the Drinkwater, Chieftain, Glory, Crowning Glory, Western Soldier, and Valiant.

As with most rich discoveries, it wasn't long before the buying and selling began, creating a rapidly changing and complex maze of ownership.<sup>4</sup> Sam Martin turned out to be a key player in early Silver Peak history and bought out half of the Vanderbilt from the Robinson brothers and partners.



He paid them with the deed to a quartz mill he built. In addition to the Vanderbilt, he bought out the Hughes brothers and partners, which gave him two-thirds interest in the area's best mines—the Drinkwater, the Chieftain, and the Glory. Martin eventually held interests in nearly all of the area's major gold mines.

In addition to market fluctuations and changing owners, two other factors in determining the fate of the new mining community were the nature of the ore bodies and the technology available to extract the gold and silver. At first Silver Peak's geology seemed pretty basic. Most of the gold was found in lenticular quartz lenses that were commonly located in outcrops or veins that ran horizontally or vertically near the surface. According to Donald Hardesty, professor of anthropology at the University of Nevada, Reno, two mining methods worked well on this type of gold. One is surface mining, which can be as simple as one miner working an outcrop or as complex as a modern day, industrial, open-pit mine.<sup>5</sup>

The second method is called rat-hole underground mining, economical when the gold is buried close enough to the surface so that windlasses, whims, and other low-tech equipment can remove the ore. "Rat hole" was a term adopted from the Spanish name "el sistema del rato," meaning "system of the



"The second method is called rat-hole underground mining, economical when the gold is buried close enough to the surface so that windlasses, whims, and other low-tech equipment can remove the ore." A windlass in operation. (Photograph courtesy of Sherry Mattei.)

moment," a low-cost, labor-intensive system of mining used in Spanish Colonial America.<sup>6</sup>

Both of these methods worked well in the mines of the Red Mountain District. Neither required the advanced technology nor the capital investment of the third early-day method-deep, industrial, underground miningwhich was used in the mines on the Comstock Lode at Virginia City. When the gold was buried two hundred to three hundred feet below ground, then steam engines and other industrial machinery became a necessity for mining the ore, dewatering the mines, hauling, and milling. Thus, the technology used at Silver Peak was standard for the day.

One elaborate system employed for hauling ore to the mills in Silver Peak was quite impressive, even though it was not considered particularly innovative

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back then. When plans were scrapped for an eight-mile railroad linking the Drinkwater and Glory Mines to the ten-stamp mill in Silver Peak, a one-and-a-half-mile surface tramway was built. Using the force of gravity, loaded cars moved downhill and dumped ore into bins, which then filled enormous wagons that are thought to be the largest ever used in Nevada. *The American Journal of Mining* described these huge wagons:

It is believed that these wagons are the largest on the coast. The tires of the wheels are five inches broad, the hubs eighteen inches in diameter, the spokes look like the arms of a water-wheel . . . . While our informant was at the mill one of these wagons, drawn by twelve mules arrived with 24 tons—48,000 pounds—of quartz, which is the ordinary load.<sup>7</sup>

Unlike the Comstock, Silver Peak's early mines did not present new challenges. The men and their mines appeared to be ordinary for the 1860s in Nevada.

#### THE MILLS

Stamp mills arrived closely behind the gold discoveries, and they arrived on wheels. Rather than being built from the ground up, at least three of the four stamp mills built during that time period were either shipped from or (later) to other mining camps. Among these mobile mills was the Hughes brothers' "toy" three-stamp mill, which they set up at Red Mountain Spring five and a half miles away. Water was such a precious commodity that they were willing to pack the ore that far to their tiny mill, which was later moved to Belmont, Nevada.

In 1866 Sam Martin hauled a ten-stamp mill to Silver Peak from Jacobsville, near Austin. Referred to either as the Martin or Vanderbilt Mill, it was designed for wet crushing and lacked roasting facilities, so it was losing more silver than was being recovered from the ore. Ben Viljoen, who in 1996 was a mining engineer and supervisor for Mineral Ridge Resources, Inc. (MRRI), commented on the shortcomings of the early mills:

Originally, the ore was brought down from the mines by wagon into town here, where there were a whole bunch of mills—at least six or seven of them—which were amalgamation mills and gravity-type mills. Well, first of all, they were stamp mills, and then the material (after it's crushed by the stamps) comes out through the screen across amalgam sheets. These amalgam sheets are copper sheets that are covered with mercury. And as the material flows across the sheet, mercury sticks to copper, and then gold sticks to mercury. So as it would build up with mercury, then it's taken off with putty knives, 9

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retorted, and the gold's left behind. The mercury goes into a vapor, and then it's condensed back to be reused again. The gold's recovered that way. And then from there it would go onto tables or a sluice box—some gravity method—to separate. Since gold's heavier than rock, the gravity method would drop the gold out, in principle.

Now, they weren't very efficient in this area [Mineral Ridge Mining District], because the gold is so darn fine that the gravity didn't help. The particles . . . the size of the gold is, I believe, about four hundred mesh, which is four hundred holes per square inch in a screen. So it's very, very fine, and the gold didn't have enough surface area to be caught by the mercury. And then it was such a small particle size that, even though it's heavier than the surrounding rock, the surrounding rock was still heavier because of the size of it. So the gravity method was never very successful.<sup>8</sup>

It is not surprising that Martin's mill closed in 1866 and never reopened. As awareness of milling losses increased, experimentation began. One of the earliest innovations was the addition of steam-powered stamps. A forty-stamp mill was built by the Silver Peak and Red Mountain Gold and Silver Mining Company (SP/RM).<sup>9</sup> Although original plans called for forty stamps, that many were never installed, but the addition of steam power boosted production far beyond what was normal for thirty stamps.<sup>10</sup>



"One of the earliest innovations was the addition of steam-powered stamps. A forty-stamp mill was built by the Silver Peak and Red Mountain Gold and Silver Mining Company." The mill was constructed in 1867. (Photograph courtesy of the Central Nevada Historical Society.)

The company's first mill superintendent was Joshua E. Clayton, nicknamed "Professor." A well-known mining engineer and geologist, Clayton Valley, near Silver Peak, is named for him. According to the *Sacramento Union* and *Territorial Enterprise*, he was successfully experimenting with a new crusher.<sup>11</sup> It is unfortunate that the newspaper didn't publish the design, because it may have been the same steam-powered stamps that SP/RM later installed. At any rate, Clayton's attempts to modernize were innovations that relied on and protected capital investments.

Investments meant life or death for Nevada's mines. In addition, eastern financing led metallurgical research to develop new, cost-effective methods for extracting gold and silver from the ore. However, dollars alone couldn't do the job. Real success came from Eastern money mixed with Nevada savvy. It was local men who ironed out the bugs, adapting new technologies to fit everyday mining and milling in the Mineral Ridge District.

#### THE COMPANIES

After its initial discovery, and thanks to East Coast investors, Silver Peak prospered. Soon individual miners were replaced by mining companies that could not only afford the technology to mine on a larger scale but could often afford experimenting with mining and milling technology. That required capital and plenty of it. Silver Peak became "... part of the capital frontier as much as it was part of the miners' frontier," according to historian Steven F. Mehls.<sup>12</sup>

In addition, several national economic forces spun into action. The Civil War ended in April of 1865, just in the nick of time to salvage Nevada's mining industry. It freed eastern capital for western mines. Investors speculated that the demand for gold and silver would increase as the need to redeem wartime greenbacks increased. At the same time, thousands of veterans headed West seeking fortune and adventure. Together, money and manpower were the powerful forces that bounced mining out of its doldrums.

In Silver Peak, one company dominated the scene. The Great Salt Basin Mill and Mining Company (later the SP/RM) became the largest operator during the early production era. Company owners like Samuel J. Tilden (later Governor of New York State) visited Silver Peak in 1864 and acquired the most valuable mining properties in both the gold and silver districts by 1867. In fact, the Crowning Glory Mine was one of the most valuable gold properties in the state, which meant SP/RM definitely dominated the area. They also poured money into building mills for their mines. Their holdings included Martin's ten-stamp mill, which was producing up to \$2,000 per day in 1866, as well as their own mill that opened in September 1868. By 1869 there were thirty stamps crushing gold ore from the Red Mountain District at a rate of forty-five tons per day.

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JOHN INSLEY BLAIR 1802 - 1899

Early Entrepreneurs

John Blair and his money helped shape the early days of Silver Peak. Blair controlled some of the most important patented mining claims in the Silver Peak and the Red Mountain mining districts.<sup>13</sup> Blair was a New Jersey investor and millionaire business tycoon who made his money in railroading. A self-made man, he went to work in a country store at the age of eleven. Within sixteen years he owned a chain of five general stores in New Jersey. He also ran four flour mills and founded the Lackawana Coal and Iron Company, and by the time he was fifty years old he became the director of the Delaware, Lackawana, and Western Railroad.

Blair was a powerful man in New Jersey. He served as a delegate to the Republican National Convention in Chicago in 1860 where Abraham Lincoln was nominated as President of the United States. But he lost a bid for governor of New Jersey in 1868, which seemed to end his political career. Meanwhile, his prominence in the railroad industry expanded. He helped secure the charter for the Union Pacific Railroad in 1862 and personally directed construction of the first one hundred miles built west of Omaha, Nebraska. At one time in his career he held the position of president over sixteen different railroad companies. Blair also laid out sites for eighty towns and gave them gifts of land and money to build more than one hundred Presbyterian churches. By the time of his death he had given away over \$5 million.

He joined another well-known East Coast investor, Samuel Tilden, later Governor of New York State and an unsuccessful presidential candidate. Along with several other partners, they formed the SP/RM, which was incorporated in New York in 1866. They invested in some of Silver Peak's richest gold mines like the Drinkwater, Chieftain, Glory, and Vanderbilt.

His son, DeWitt Clinton Blair, was heir to his father's \$70million fortune and continued the SP/RM's operations until 1906. He then sold it to the Pittsburg Silver Peak Gold Mining Company for an estimated \$750,000. Later, the Pittsburg Company built a modern company town a few miles north of Silver Peak and named it Blair in his father's honor.

Whether or not Blair ever visited Silver Peak before his death in 1899 is unknown, but today Silver Peak residents still direct travelers to turn south at "Blair Junction"—a 130-year-old tribute to one man whose vision and money left his mark on Nevada. Meanwhile, what happened to the small mining operators who had played such an important part in establishing Silver Peak? Many stayed on, some working for the new corporations. For example, after his mill closed, Sam Martin went to work as superintendent of the SP/RM mill. The Hughes brothers apparently sold their holdings and left behind their three-stamp mill which was moved to Belmont.

At least one small operator, H. W. Barton, managed independently. Barton's arrastra was a good example of a small-scale operation with low overhead, and it stood in sharp contrast to the advanced technology furnished by moneyed operators of the day.<sup>14</sup> Barton worked the Double Eagle Mine six miles west of Silver Peak using a Mexican-style arrastra. The ore was ground by several large stones dragged by mules around in circles on a pavement of stone. The arrastra was a crude operation, and Barton may have extracted the gold by panning.

Barton's transportation system was also pretty basic—Native American men were paid fifty cents to haul a load of 100 pounds of ore on their backs a distance of three-quarters of a mile from the mine to the arrastra at Coyote Springs. Because that short distance was a grueling, steep, uphill climb, few offered to make more than one trip each day. Even so, the ore was so rich at \$250 to \$300 per ton that Barton seemed to have survived for quite some time on earnings from his low-overhead methods.

Another company tried to follow SP/RM's formula of land purchases and investments in technology—but failed. The New York and Silver Peak Mining Company led by an easterner named Colonel Catherwood bought up claims and built a twelve-stamp mill. However, Catherwood failed to study the local geology. It seems he purchased claims in the Silver Peak Mining District that turned out to be worthless:

It was the quickest sale ever made, and was remarkable, even in those halcyon days when Eastern greenbacks found their way quite freely into the empty pockets of the prospectors.<sup>15</sup>

When his Silver Peak investments totaling \$200,000 failed to yield a return, Colonel Catherwood moved his mill to Palmetto. Finding no success there either, it wasn't long before he packed up and headed back to the East Coast. His experience confirmed that eastern capital alone did not guarantee success without that critical link with Nevadans.

### LIVING CONDITIONS

When the first claims at Silver Peak were filed in late 1863 and early 1864, the Silver Peak spring provided the most precious resource—water. It was so filled with minerals that later residents claimed they "chewed the water," but it worked just fine for powering the amalgamation mills.<sup>16</sup> It didn't take long for other necessities to follow. The early Silver Peak mining

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camp in 1864 consisted of three boardinghouses, an equal number of saloons, and two stores. Food, shelter, and recreation had arrived. The town's population was 150, most likely all men. Since the mines were two to eight miles away, some miners probably camped closer to the jobs that paid \$4 per day.<sup>17</sup> Jobs varied little in any early-day mining town. The choice was either mining or milling. Also, both ore and basic supplies had to be hauled back and forth between major trade centers.

However, once the first East Coast dollars arrived, Silver Peak was poised at the very brink of the industrial revolution. Change arrived quickly to the tiny community. Jobs with some variety opened up. The standard of living improved as well. Big business took over from original owners, and when investors bought the latest in machinery to improve the milling process, a division developed within the town itself. Early prospectors and surface miners still lived close to their small claims and were still self-sufficient, but they were no longer counted among the community's movers and shakers. SP/RM created a variety of jobs, some with more status than others. For example, in addition to mining or hauling, a man might now aspire to jobs like "millwright" or "superintendent"—jobs that conferred higher status and were considered newsworthy in local newspapers.

From all appearances, Silver Peak was taking its first tentative steps toward permanence. The town became a major hub for mining activity in southwestern Nevada. In 1868 ore discoveries in Death Valley gave Silver Peak the added role of supply center for Lincoln and Nye County miners during the 1870s. Now a vital trade center, prospectors and miners traveling to Pahranagat and Death Valley stopped in Silver Peak. Eventually, Silver Peak's prospectors were enticed to follow, creating an exploration exodus similar to that of other mining towns. This phenomenon was common throughout the mining West.<sup>18</sup>

Nevada newspapers acknowledged Silver Peak's prominence during this time. Due to the distances between towns, it took considerable time for Silver Peak's news to travel, but on May 5, 1866, the *Territorial Enterprise* said Virginia City miners had been hired to work at Silver Peak. In news articles written with the "booster attitude" of the day, reporters touted the latest discoveries in glowing terms. But their articles also proved that Silver Peak, despite its isolated location, was far from insulated from its neighboring towns. Indeed, it played an important role in the state's developing mining industry.

### Chinese Workers

Nearly lost is the fascinating story of Chinese workers in the Silver Peak area.<sup>19</sup> It seems SP/RM employed one hundred men: sixty white men who received \$70 per month plus board to work the mines and mill and forty Chinese who received less—\$1 per day—probably to build roads, haul wood, and cook meals.

A recent archaeological study uncovered exciting clues to corroborate that report. Archaeologists found two small campsites used by Chinese laborers who were believed to have worked on various roads or railbeds in nearby Echo Canyon.<sup>20</sup> Along the main route to Coyote Pass was an open short-term campsite, according to the remains of tent platforms, tree stumps, and charcoal from campfires.

Food was prepared outdoors, a feature common to other Chinese camps throughout the West. Along with canned foods, a typical dinner menu for the Chinese workers would have been fresh roasted meats such as jackrabbit, sheep, goat, or pork—the latter was a favorite among Chinese. Bone fragments located there were unevenly chopped as though butchered with a cleaver, the favored method used by Chinese cooks during the early years of western settlement.

An opium tin lid revealed another interesting detail of the Chinese story. The lid was from a rectangular opium can, and the cartouche said it came from a district in Hong Kong named Huan Shang and was sold by the Fu Long store.<sup>21</sup> Translated into English, the opium brand was "Abundant Luck," and other Chinese characters were "district up," "prosperity," and "arriving." Based on nineteenth century records from a Chinese store in northern California, the Kwong Tai Wo Company lists the Abundant Luck brand as relatively expensive opium, affordable when shared.<sup>22</sup>

Nearer the Oromonte Mine, Chinese workers briefly camped in a natural rock shelter. It was formed by a large stone canopy with a pyramid-shaped rocky outcrop guarding the entrance, which created a U-shaped room with openings on either side. The Chinese were not the first to find this wonderful natural shelter. Native Americans probably stopped there to rest while they processed plants gathered for food. Remnants of their tools were found in this area, including four bifaces (bifacially flaked tools used as knives and scrapers) and a flake tool, made of grayish-black and black obsidian, along with two granite metate (a milling stone used primarily to grind vegetable foods and seeds) fragments.

Evidence that this rock shelter later became a Chinese campsite was confirmed by a few small treasures left behind. Among the artifacts uncovered were ceramic sherds from bamboo-pattern rice bowls which were popular among working-class Chinese in the late 1800s; stoneware fragments from one soy-sauce jar that was probably imported from China; and tea containers similar to those found at a Chinese cabin site near Truckee, California. In addition, the Chinese residents had punctured some lids from food cans to create kitchen tools such as strainers, sifters, and hanging weights.<sup>23</sup>

One longtime Silver Peak resident, Ruby Griffin, recalled details about the Chinese who lived in the area. She said owners of the only Chinese restaurant in town were generally "well-regarded" by locals.<sup>24</sup> As with most strangers, Chinese who stayed to set up a business in town were more readily accepted than drifters searching for work. The few Chinese men who stayed at the tent camp and rock shelter were probably low-paid workers who were 15

just passing through. Attracted by jobs building some of the roads within a two-mile radius, they camped outside of Silver Peak until their work was done and then moved on. Across a small ravine from the rock shelter lies the remnants of a road supported by a beautifully hand-built, rock retaining wall. However, there is no way of tracing the cave's true occupants or whether they labored on that particular road.

Evidence of Chinese women and children was also missing from the artifacts that survived more than one hundred years, although that came as no surprise. Not only were women scarce in transient mining camps early on, but laws such as the 1875 Page Law and later anti-Chinese immigration laws had stopped the immigration of Chinese women by the time these men came to Silver Peak.<sup>25</sup>

Today a headstone in Silver Peak's cemetery honors one Chinese resident. It marks the grave of Jerry Wong Hong Chong, who died at the age of eighty-six in 1928. The inscription reads, "Resident of Silver Peak District for fifty years/ He had no enemies but many creditors." Nothing else is known of the man, and it is pure speculation to guess he might have been one of the several cooks listed in the 1900 and 1910 censuses. The only thing we know for sure is that he remained in Silver Peak beyond its early days and into a new era.

#### THE TURNING POINT, 1871-1906

The heady days of SP/RM were numbered. In spite of the huge sums of money pouring in from the East and good production, SP/RM hit hard times in 1870. John Blair closed down operations in 1871, and the property sat idle until 1877. Although the company protected their claims, Silver Peak very nearly disappeared for lack of jobs. First Lieutenant George M. Wheeler, U.S. Army Corps of Engineers, reported in 1871:

The principal work has been upon the Crowning Glory Mine. The company employed seventy-five men upon it for three years at \$4 per diem. The amount expended in the mineral development of these mines is about \$280,000. Total amount extracted, about \$2,000,000.

At present only four or five men remain here, all the hands having left, while the mill lies idle for repairs and all work is suspended. There are in the place about twenty houses built of concrete, one store, and one livery stable. Materials for making concrete are close at hand, gravel being on the ground and limestone in a butte nearby, and a lime-kiln near the mill. The company burns their own lime. There is one stage-line to Aurora, fare \$25 to that point and \$50 to Reno on the railroad. Freight 4 <sup>1</sup>/<sub>2</sub> cents per pound to Wadsworth. Mail weekly, I think.<sup>26</sup>

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The 1880 census counted only ten individuals living in Silver Peak, one of whom was a female. Of those left, five were miners, two were clerks, one a merchant, and another a mail rider. The only female in town was a housewife. Only two of the ten were foreigners—one from Great Britain and one from Austria. Perhaps those ten hopeful souls stayed for the promise of a railroad. The Carson and Colorado Railroad from Belleville to nearby Candelaria was just two years away. That would mean cheaper shipping costs for food and supplies coming into the area and lower overhead to ship ore out to smelters, making business feasible again.

Very little information appeared in newspapers about Silver Peak during this time. Sometimes no news is good news for a mining town in decline. Times were tough, and many other Nevada mining camps faded into obscurity under just such conditions. Later information revealed that Silver Peak did survive, thanks once again to small operators and leasers who worked part-time or seasonally. They stayed on in spite of the promising discoveries at nearby Bodie, California, in the late 1870s and early 1880s. The struggle for survival spanned thirty years, from 1871 to 1906, and Silver Peak hung on by a mere thread, one which the future would prove was made of gold and silver strands.

In fact, the stage was being reset, making way for a new phase of industrialization following the turn of the century. After closing, SP/RM went through an extended period of reorganization and refinancing. The company resumed mining operations briefly in 1877 when it remodeled a mill and patented sixteen claims, but it ultimately filed for bankruptcy. Claims were protected and legal maneuvering continued in order to survive several law suits. The bankruptcy spawned a series of name changes, ending as the Silver Peak Mines Company operated by John Blair. Then Blair asked Sam Wasson to take charge of his company. Wasson was a prominent Silver Peak resident who arrived in 1872 and later served as a state senator from Esmeralda County in 1899 and 1901. Particularly interesting is Wasson's description of John Blair and their working arrangement:

There was a man (John Blair) who it was a pleasure to work for. I took charge of the property in 1891. I wrote to him that if he would send me a grubstake I could make the mine pay. By the next mail I received a check for \$250 and in the summer of 1891 a dividend of \$?,000—the first ever paid on the property—was made by the company. I had charge of the mine for sixteen years, handling more than \$200,000 in cash and not once in all that time did Blair look inside my books. He told me to handle the property as if it were my own, giving me a kind of lease drawn up under chin-music without papers and what I did was "law and gospel." Blair took me to New York to see the sights and treated me like a prince.<sup>27</sup>

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Wasson's relationship with Blair was one built on respect between a Nevada miner and a wealthy eastern investor. Blair trusted Wasson with his valuable property, and in return Wasson lived up to his word (chin-music). Wasson's skillful operations were described in detail in the *Mining and Scientific Press*, November 26, 1898:

There having been no development work done, all the mining has been quarrying on the surface by flat-broke miners, and with a mill out of repair and antiquated in design, this was not a flattering outlook; but by perseverance and hard knocks Mr. Wasson finally got things going in a small way and took out 2,000 tons of ore which pulled \$20 per ton . . . .

In the spring of 1898... Mr. Blair authorized him to drive a cross-cut tunnel which had been planned to tap the ledges 750 feet below the croppings.... On October 27th (1898) the footwall of the vein was reached and the vein proved to be 70 feet wide of solid ore .... On the surface the north of Drinkwater vein shows an average width of about 16 feet, the back or Soldier Boy (Western Soldier) vein shows about 24 feet thick, these veins on the surface being about 80 feet apart.

Sam Wasson proved well worth his \$250 grubstake. The results of his work at the Drinkwater boosted Silver Peak's economy for years to come and repaid Blair's trust handsomely. However, problems with milling remained—too much precious metal was being lost in the tailings, sometimes as high as 60 percent of the gold values. Wasson himself managed \$16 per ton from amalgamation of ore from the Chiatovich Stope of the Drinkwater Mine, but another \$7 per ton was later taken out of the tailings with the cyanide process.

When John Blair died at the age of ninety-seven in 1899, his son DeWitt was heir to the Silver Peak Mines Company, which he then reorganized into the Silver Peak Gold-Mining Company, but the property remained idle. With no work available locally, most miners left town for the Bodie boom. Silver Peak returned to the hands of small operators. Wasson discovered the Missouri lode and opened the Missouri Mine in 1885 or 1886. It was another classic example of rat hole mining, with several inclines and open cuts, one tunnel, and only one stope cut to reach the ore.<sup>28</sup>

The four Valcalda brothers—John, Jim, Andrew and Otis—continued to work part-time. They were Italian immigrants who "eked out a meager living" in 1885. John was apparently the most active of the brothers and led the way in working their six claims (the Columbus, Washington, Lincoln, Oregon, Peorto, and Frank 2). Using the near-surface, rat-hole mining method, they concentrated on outcroppings of ore and mined no more than ten to twelve feet deep. Sometimes they crushed the ore in large mortars, but

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they also used the simple two-stamp mill they had built themselves at the nearby Valcalda Springs.

By using cost-effective surface mining techniques, the Valcalda and the Missouri mines were profitable for small operators, which was about all that remained. Other small operations and mills dotted the area including Columbus, Esmeralda, Vega, and Coyote Springs. Still chugging along, Barton's arrastra continued as a throwback to the early days.

Yet somewhere among Silver Peak's remaining ten people were the trendsetters, those who adopted the lessee or contract system of mining, a method popular throughout the West at the time. The owner would lease portions or all of his mine to miners who received a percentage of the total value of the ore produced. The risk and expense of mining fell to the contractor, and owners could increase their income by owning a mill and charging leasers for processing the ore. Any actual mining activities that did occur were conducted at a very low level of effort, probably by local residents working part-time. It appears that no mills were operative during the period.<sup>29</sup>

In Silver Peak's case, small operations and lease arrangements were two visible signs of hard times. In addition, the depressed economy demanded experimentation in milling practices in order to increase profits and lower overhead. Two courageous men met this challenge head-on and led Silver Peak toward cutting-edge technology. They were John Chiatovich and Fred Vollmar.

#### JOHN CHIATOVICH'S MILL

John Chiatovich's love for mining apparently took a back seat to the need for a steady income once he had a family to raise. He and his wife Margaret established a ranch in Fish Lake Valley and launched several businesses in Silver Peak. The Chiatovich general store and livery not only supplemented the ranch income, but it supplied much needed services to the small community.

His businesses were successful, but his mining fever never died. He leased properties from the Silver Peak Mines Company and patented the Mary Mine in 1891. Next he built a ten-stamp mill to process his ore. The assays were good and the gold was there, but when his mill wasn't pulling out the values he needed for a profit, John teamed up with Fred Vollmar to solve the problem. Educated in chemistry and metallurgy, Vollmar must have been familiar with some of the latest technologies being peddled throughout the West, such as the new cyanide process patented by the MacArthur-Forrest group of Glasgow, Scotland, in 1887.

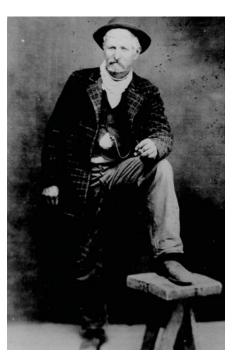
First used on a production scale in 1889 at the Crown Mine in New Zealand, when the cyanide process was installed the following year (1890) at Crestone, Colorado, the transition from lab to mill was bumpy. Within a few years, it was perfected. The trick, they found, was to crush the rock to just the

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### JOHN CHIATOVICH 1829-1907

Iohn Chiatovich, а Slavonian immigrant, arrived in Nevada to work in the Comstock mines in Virginia City and at Belmont.<sup>29</sup> Later, he settled on a ranch in Fish Lake Valley, near Silver Peak. He opened a general merchandise store and a livery stable in Silver Peak, probably in the mid-1860s. He was married to Margaret Wolford Maginness Chiatovich, who had four or five children by a previous marriage. Together John and Margaret had five more children; Martin, John Jr., Marco, Lillian, and Cecil.



John Chiatovich. (Photograph courtesy of Barbara Dodgion.)

Although he owned the ranch and operated the store, John loved mining. By 1891, he owned the patent for the Mary Mine, and in order to process the ore, he built a mill in Silver Peak. Because the mill was not efficient in getting the values from the ore, he hired Fred Vollmar to design a cyanide plant for the mill that opened in 1893.

The Chiatovich cyanide mill has long been considered the first in Nevada and is one of the first in the West built specifically for the emerging cyanide process of gold recovery. If Chiatovich's cyanide mill was not the first, it was certainly on the cutting edge of milling technology, and in central Nevada he was declared the "King of Silver Peak" by the *Goldfield News*, December 1, 1905, for introducing this new technology.

John and Margaret raised their family on the Fish Lake Valley ranch, and several of their children, grandchildren, and great-grandchildren remain in Nevada today. John's oldest son Martin married Nellie Cleary and also had four sons and a daughter—Stanley, Jack, Pat, Margie and Bob. Stanley Chiatovich married Frances Hill and had three daughters—Barbara Dodgion of Carson City, Janice Johnson of Idaho, and Jaci Jones of Fallon. John Chiatovich lived to be nearly 80, and at his death left the Fish Lake Valley ranch to another generation of Chiatoviches.

# FRED VOLLMAR SR. 1854-1931

Fred Vollmar was born of German immigrant parents in Westport, Wisconsin.<sup>31</sup> His family moved to California where he studied chemistry and metallurgy in San Francisco. He was twenty-six when he set out to make his fortune on the Comstock Lode in 1880. From Virginia City, he followed the gold strikes first to Bodie, California, and then back to Lida, Nevada. At Lida, Fred worked with Bob Stewart to build his first mill, which provided good experience. Still a young man at thirty-six, but with plenty of experience and knowledge, Fred arrived in Silver Peak in 1890. There he met John Chiatovich. By then, John was sixty-four, still loved mining, and had not lost his adventurous spirit. His mill was struggling, still not getting the best values out of the ore. Perhaps John saw an opportunity in the new cyanide milling technology, or maybe Fred introduced the concept to John. Either way, together they built one of the first cyanide mills in Nevada. It began operating in 1893. Between 1922 and 1927, Fred held leases on thirty-four patented claims from the Pittsburg Silver Peak Gold Mining Company, and he helped the Black Mammoth Consolidated Mining Company obtain a lease from the Pittsburg Company.

Once the mill was built, Fred started the first school in Silver Peak in 1895 and served on its board for many years. Fred and his wife Molly had two children, Fred Jr. and Johanna. Vollmar's children carried on his legacy of mining interests and civic contributions. Fred Vollmar Jr. became the well-known Silver Peak promoter who brought major investors to the area's endeavors between 1927 and 1940. Johanna married Hugh Cameron, and they raised two children at Silver Peak. Cameron reportedly maintained mining interests throughout his life. Vollmar's granddaughter, Mary Frazzini, became an assemblywoman representing Washoe County in the Nevada State Legislature in 1965.

right size for the cyanide to retrieve the gold—not too fine, not to the point where it produced slimes like the stamp mills. With that innovation, "by 1893 mills utilizing the cyanide process became profitable from California to Deadwood, South Dakota."<sup>32</sup> Recovery rates soared to 80 or 90 percent.

If necessity was the mother of invention, then the father was economic recession. Times were tough, with Nevada's economy experiencing a downturn in the early-1890s, but Chiatovich was willing to gamble, and Vollmar contributed the needed technical expertise. Together they built one of the first cyanide mills in the West. The Nevada Mining Record in its April

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John Chiatovich and Fred Vollmar built one of the first cyanide mills in the West. (Photograph courtesy of the Central Nevada Historical Society.)

4, 1928, edition claimed, "The Old Chiatovich Mill was the first plant in the United States and second in the world to use cyanidation, according to the early-day millmen of the district."

Cyanide offered an exciting new process, especially for ores like those from the Mary Mine, but it was still being tested in the real world. It turned out to be a solid bet. As history shows, the cyanide process brought a technological revolution that is the basis for today's milling and heap leaching.

Locals know the story of John Chiatovich's mill, but somehow he has been overlooked in history books. Most often credit is given to University of Nevada Professor Robert D. Jackson as the first in Nevada to try the cyanide process to recover gold and silver from tailings around Washoe Lake in 1896. John Chiatovich may not have been the first, but he was definitely three years ahead of Professor Jackson.<sup>33</sup>

#### FAMILIES AND WOMEN ARRIVE

While recession gripped Nevada in the 1890s, and in spite of the allure of the 1899 Klondike gold rush, the struggling little town of Silver Peak survived to see the twentieth century. The 1900 census listed 135 people in Silver Peak and the surrounding area, so some residents seemed to be settling in for the long haul. Along with the Chiatoviches and the Vollmars, other families had arrived, enough to warrant opening the first school. A post office brought news from the rest of the world, and the first of a new breed, women prospectors, passed through town in their search for fortune. Times certainly were changing.

One female prospector was Josie Earp, wife to the famous lawman Wyatt Earp. In the autumn of 1902, while camped at Silver Peak, she noted:

I found a likely looking piece of gold ore that assayed so rich we turned back and  $\ldots$  spent a couple of weeks fruitlessly prospecting for the source of the sample. We never found it and nearly froze to death trying.<sup>34</sup>

Josie may have crossed paths with other women prospectors in the area, including Ferminia Sarras for whom the town of Mina, Nevada, is named.

Ferminia Sarras came to Nevada sometime around 1881, the first date she was listed on Esmeralda County tax records where she was described as "Spanish Lady, Belleville." Much of her story had been lost until recently when author Sally Zanjani worked with Ferminia's great-grandson to reconstruct the past, including the tangled family relationships and numerous marriages.

Ferminia always described herself as "a Spanish lady of royal blood," which was indeed true, but she was often mistaken as having Mexican ancestry. It appears that she may have been married as many as five times during her life, often to men who were younger. Her youngest son was named Joseph A. Marshall, although Ferminia apparently never married anyone named Marshall. One newspaper article claimed that all of her husbands died violent deaths, and author Zanjani speculates that she may have been interested in men who were handy with a gun because they could help protect her claims. One was Archie McCormack, a Canadian-born gunman twelve years younger than Ferminia, who was killed in 1906 in a gunfight while defending one of her claims.

However, Ferminia did not depend on these men for her livelihood. She began prospecting in the Candelaria area in 1883 and went on to file a number of claims on copper mines in the Sante Fe district. From there she spent a few years prospecting in Silver Peak but didn't have much luck. That was during the 1890s, a time when Nevada's economy was experiencing the doldrums. She returned to the Sante Fe district in 1899, and it was there that she eventually made her fortune. She prospected alone wearing men's clothing such as pants, boots, and a backpack. By the time she died in 1915, she had made several fortunes on her copper mines, often stashing the gold coins from her sales in her chicken coop where she believed her wealth would be safer than in the banks.

Each time she made a profitable sale, Ferminia would travel to San Francisco, stay in the finest hotels, shop for elegant clothes, and enjoy fine dining and young men until her money ran out. Then she would return to 23

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One cannot resist observing that when liberated from the cloistered world of the upper-class Latin American woman in the place rightly known as a "man's country," Ferminia used her freedom much as a man of similar background would have done. In this tradition, wealth was to be enjoyed and generously spread among one's friends, not devoted to the civic purposes of churches and organized charities; individualism was the normal mode, not the galling restraints of team-work and joint enterprise; and a good deal of blatant philandering was both a pleasurable assertion of the self and a status symbol, not in the least damaging to one's reputation. If Ferminia had been a man, her compatriots would have admiringly called her *muy hombre.*<sup>35</sup>

Ferminia named her many mining claims after her family, friends, and lovers, and later the town of Mina was named in her honor. She lived in small cabins or adobe houses in several locations but called Luning, Nevada, her home between prospecting trips.

Ferminia's belief in the value of her mines eventually proved to be true. Her most valuable mines were located in Giroux Wash, Nevada. Likewise, her belief in herself never wavered. She arrived in Nevada a Spanish lady of royal blood and retained her nobility as Nevada's Copper Queen.<sup>36</sup>

# A NEW CENTURY

As the town of Silver Peak greeted the new century, it touted both ethnic diversity and a wider selection of jobs. Most residents counted in the census were American or a combination of European and American, as well as twenty Native Americans. Thirty-six people from all over the world now lived in this out-of-they-way spot—Canadians, British, Hispanics, Iberians, Chinese, and Japanese. There were nine professionals, two merchants, six domestic workers, and one boardinghouse manager. Only twelve miners lived in the town of Silver Peak, probably because more lived in a boardinghouse located near the mines.

There were thirty-two children in town at the time of the 1900 census, and four lived near the mines with their families. Silver Peak's first school opened for the 1895 and 1896 school year, and Fred Vollmar Sr. served as Clerk of the School Board. Eva I. Bradshaw, the first teacher, received \$60 per month for her work.<sup>37</sup>

For the small town's population to expand from ten in 1880 to 135 in 1890, everyone had to play a part, and one of the vital parts was postmaster. The town's post office had been open since April 2, 1866, and many

postmasters' names are familiar, including Chiatovich, Wasson, Hanchett, and Vollmar.<sup>38</sup>

While the postmaster delivered the mail and the schoolteacher educated the children, others like Sam Wasson were busy keeping Silver Peak's money in town. *The Tonopah Daily Times* reported that "card sharps" were a common occurrence. They traveled from town to town trying to fleece the locals but often found themselves fleeced. One wild poker game in a Silver Peak saloon lasted two days and nights:

At the table were four or five real card sharps... from Candelaria. A number of old desert rats were participating, among them... Sam Wasson....

They proved too much for the stra,ngers. At the end of fortyeight hours, the sharps were all broke—their last dollar gone. They landed at Silver Peak with several thousand dollars each. When they left they had been reduced to the necessity of begging rides on the slow, creaking, dusty freight wagons.

Two hundred and sixteen decks of cards were used during that memorable game. About the time the sharpsters would be able to mark a deck . . . one of the old desert rats would call for a new deck and the one then in use would be thrown on the floor. By the time the long session came to a close, discarded cards were knee deep about the players.<sup>39</sup>

Silver Peak had evolved with all the trappings of a Nevada civilization families, a school, a post office, and gambling. Even so, the townspeople had not lost their sense of humor.

Notes

1. Bertrand F. Couch and Jay A. Carpenter, *Nevada's Metal and Mineral Production* (1859-1940) (University of Nevada Bulletin) 37, no. 4 (1943). Statistics from Couch and Carpenter's University of Nevada Bulletin were cited in the two main sources for this book. Unless otherwise stated, information for this book was drawn from Hugh A. Shamberger, *The Story of Silver Peak, Esmeralda County, Nevada* (Carson City: Nevada Historical Press, 1976) and from Western Cultural Resource Management, Inc. (WCRM), *The Archaeology and History of Mineral Ridge, The Social and Technological Evolution of a Mining District.* Prepared by Steven F. Mehls, Renee Corona Kolvet, Susan Stornetta, and Donald L. Hardesty, with contributions from Ralph Giles, Bob Estes, and Stephen Yost, (Sparks, NV: BLM Report Crr-6-1669-3. WCRM Report 96-R-079, 1998).

2. To avoid name confusion, it is helpful to understand that two separate mining districts were first formed—Silver Peak District for silver and Red Mountain District

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Early Entrepreneurs for gold. By the early 1900s both districts were called the Silver Peak District and are now referred to as the Mineral Ridge Mining District. This author will use the correct name for each era.

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3. Sally Zanjani, A Mine of Her Own, Women Prospectors in the American West, 1850-1950 (Lincoln and London: University of Nebraska Press, 1997), 60.

4. Author Hugh Shamberger carefully documented Silver Peak's changing ownership of mining claims and mills in his book.

5. Donald L. Hardesty, Ph.D., "Mining Landscapes in the American West" (paper presented at the annual conference of the Society for Historical Archaeology, Richmond, VA, 1991) as summarized in WCRM, 3-5. Hardesty identified the three mining methods most commonly used in early western mining.

6. Otis E. Young Jr., Western Mining (Norman, OK, and London: University of Oklahoma Press, 1970), 79.

7. The American Journal of Mining, 16 January 1869, as quoted in Shamberger, 11.

8. Victoria Ford, editor, Silver Peak: At Work, At Play, and At Home, (Reno, NV: University of Nevada Oral History Program [UNOHP], 2000), Ben Viljoen oral history, 202-203.

9. Because SP&RMG&SMC is such a long abbreviation, the author chose SP/RM to represent this company.

10. Increased production should not be confused with the increased efficiency that newer technology brought to mining. Investors often clamored for a greater return on their investments, and it was not unusual to see an increase in the number of stamps in a mill just prior to an operation going bust, according to Charles D. Zeier, personal communication, 2000.

11. Sacramento Union, 21 August 1868, and Territorial Enterprise, 19 August 1868.

12. Steven F. Mehls referred to Silver Peak as part of "the capital frontier" in an unpublished report to WCRM and in conversations with the author during 1996.

13. Biographical sketch composed from Shamberger, 101, as well as *The Encyclopedia Americana International Edition* 4 (Danbury, CT: Grolier Inc.,1997), 53, and *The National Cyclopedia of American Biography* 7 (New York: James T. White & Company, 1897), 21-22.

14. For a Mexican arrastra, ore was placed on a large, circular pavement of stones. Then several large stones were dragged in a circular path around a center post by mules to crush the ore. Once the ore was crushed, the gold could be extracted by panning or other methods. For a complete description, Shamberger recommends Ernest Oberbillig, "Development of Washoe and Reese River Silver Processes," *Nevada Historical Society Quarterly*, (summer 1967).

15. Engineering and Mining Journal, (18 September 1871), as quoted in Shamberger, 12.

16. Ford, Leon Hill oral history, 78.

17. *The American Journal of Mining*, (7 November 1868), see Shamberger, 11. While white workers were paid \$4 per day, Native Americans were paid only fifty cents a day.

18. Author Sally Zanjani explained in a personal conversation, January 1999, that it was natural for prospectors to leave once the mines were under development, because they preferred exploration. Ralph Mann, *After the Gold Rush*, (Stanford, California: Stanford University Press, 1982), said development of mines dropped prospectors to the bottom of the social scale, which pushed them to leave. Either way, prospectors were most often the initial claim holders who operated on a small, low-tech scale.

19. This nearly forgotten chapter in the history of the area was mentioned by Shamberger who discovered statistics on Chinese workers in the *Engineering & Mining Journal*, 13 July 1869. More evidence was uncovered during a 1996 archaeological study by WCRM, Chapter 5.

20. WCRM, 5-6.

21. The cartouche is a stamped identifier or mark on the lid showing the district and store where the product originated in China.

22. Ruth Ann Sando and David L. Felton, *Hidden Heritage: Historical Archaeology of the Overseas Chinese*, ed. Priscilla Wegars, (Amityville, New York: Baywood Publishing Company, Inc., 1993), 170-171.

23. According to WCRM, artifacts from late nineteenth century Chinese camps are often reused items that are modified, like tin can lids with holes for straining.

24. Ruby Griffin, personal communication with Renee Kolvet, April 1998.

25. Sue Fawn Chung, "Their Changing World: Chinese Women on the Comstock, 1860-1910, ed. Ronald M. James and Elizabeth Raymond, *Comstock Women, The Making of a Mining Community*, (Reno/Las Vegas: University of Nevada Press, 1998), 203-228.

26. 1<sup>st</sup> Lieut. George M. Wheeler, Corps of Engineers, Preliminary Report Exploration and Surveys, Principally in Nevada and Arizona (1871).

27. The Blair Press, 4 January 1908.

28. WCRM, 6-23 to 6-43, and J. E. Spurr, Ore Deposits of the Silver Peak Quadrangle 55, (U.S. Geological Society Professional Paper, Nevada 1906), 27.

# 27

Early Entrepreneurs 29. Charles D. Zeier, A Cultural Resources Action Plan for the Mineral Ridge Mining District, Esmeralda County, Nevada, (Carson City, NV. March 7, 1996), 5.

28

Early Entrepreneurs 30. John Chiatovich's biographical sketch is a combination of information from interviews with John's great-granddaughters, Janice Johnson and Barbara Dodgion, and from Shamberger.

31. Fred Vollmar's biographical sketch is a combination of information from Shamberger and oral history interviews.

32. WCRM, 14.

33. Tom Lugaski, Keck Museum at the Mackay School of Mines, conversation, 1997. Lugaski found evidence of a cyanide mill built in Ely that opened one year earlier— July 1892—than Chiatovich's cyanide mill.

34. Zanjani, 186. Zanjani has produced a highly readable book about women in mining. In doing so, she retrieved some wonderful stories that would otherwise have been lost. Her book grants women their rightful place in mining history.

35. Zanjani, 79.

36. Biographical synopsis drawn from Zanjani 1997, and Sally Zanjani, "The Copper Queen," *Nevada Magazine*, November/December 1995.

37. Shamberger, 26.

38. Shamberger, 18-21, covers the labyrinth of details on the famous Hanchett lawsuit that took fifteen years for the courts to settle.

39. The Tonopah Daily Times, date unknown.

# 2 The Pittsburg Era, 1906-1928

The Silver Peak drama continued to unfold after the turn of the century, its fate hinging on the rise and fall of mining fortunes. A handful of key players remained—John Chiatovich, Fred Vollmar, Sam R. Wasson. Some newcomers arrived and soon proved their staying power, such as John Shirley and Ed Cleary [pronounced Clare-ee.]. Although John Blair died in 1899, the Blair name and fortunes continued to play an important role. Because Pennsylvania investors continued funding mining ventures, the years from 1906 to 1928 became known as the Pittsburg Era.<sup>1</sup>

These years were a time of dramatic changes in the United States. Electricity arrived first in the mines and mills, then later in homes.<sup>2</sup> Travel by rail and auto became available to more and more people. The first cars appeared in Nevada, and in 1904 the Tonopah and Goldfield Railroad connected with the Carson and Colorado Railroad, giving central Nevada easier access to major markets. Meanwhile, new mineral deposits were desperately needed to infuse new life into Nevada's stale economy, and they were found nearby at Tonopah on May 17, 1900; at Goldfield on December 2, 1902; and at Manhattan in April 1905. These discoveries revived interest in central Nevada mining, and once again eastern investors entered the picture. With increased technology and financing, production soared during this time period, placing the Mineral Ridge Mining District among the top thirteen producers in Nevada. It ranked alongside districts in Virginia City, Eureka, Aurora, Tonopah, and Goldfield, each of which produced more than \$10 million by World War II.<sup>3</sup>

From all appearances, people in town were oblivious to the coming opportunity. *The Tonopah Daily Sun* described the older parts of town as populated by "old houses of adobe, weather beaten by the hot suns of summer and the fierce winds of forty years" with the ruined or discarded equipment of stamp mills lying about the area.<sup>4</sup> But behind the scenes the town's prominent men scurried to improve their community and make it more attractive for new investors and workers alike. Vollmar and Wasson helped lay out a new townsite for Silver Peak in June 1905. Vollmar was listed as the town secretary, and John Shirley's optimism was quoted in *The Goldfield Review*:

Silver Peak will be one of the biggest mining camps on the western coast . . . The camp, he says, has never looked better in its history. There are more men working now than at any time for a number of years, the mines are in better condition, and the camp generally is taking on an air of prosperity.

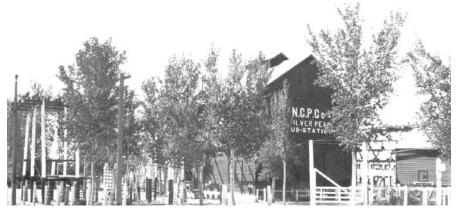
While it is true that no definite knowledge of the transaction of the old Drinkwater Mine can be obtained, it is generally believed that it has been sold to the Schwab-McKane Syndicate.<sup>5</sup>

The newer section of Silver Peak already offered four restaurants, several hotels, saloons and grocery stores, as well as a doctor who was building a drugstore. Electricity was available from the Nevada Power, Mining and Milling Company substation. Reports that eastern investment dollars were once again on the way inspired new hopes and led to land speculation. Everything was ready and waiting for an expected announcement that Pennsylvania investors had purchased the Blair holdings.

Meanwhile, two mining operations ushered in the turn of the century at Silver Peak and kept the town alive. The Mohawk-Alpine Mining Company and the Valcalda Mine were important for the town's survival and provided much-needed jobs but turned out to be bit players in the town's future. Their holdings were eventually gobbled up by the Pittsburg group.

# THE MOHAWK-ALPINE MINING COMPANY

The Mohawk-Alpine Mining Company purchased fifteen to twenty patented claims in 1904 called the Tietjen or Homestake Group. One was



"Electricity was available from the Nevada Power, Mining and Milling Company substation." (Photograph courtesy of Sherry Mattei.)

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the valuable Mary Mine originally patented by John Chiatovich in 1891, along with 3,000 feet on the Drinkwater's eighteen-foot-wide rich vein.

The man- and horse-powered operation was described in the October 20, 1906, *Tonopah Bonanza*. Adits were driven from the outcrop on the surface into horizontal ore bodies. A hand-powered windlass moved ore up a winze, which is a vertical shaft that originates underground. A whim, which is a drum turned by horsepower, lifted ore up an incline to the surface. From there, ore cars traveled by rail to a chute a quarter-mile away where the ore was dumped. Then horses and mules packed the ore about three miles and dumped it into another bin. From there it was shoveled onto wagons and hauled a few more miles before being handled again. Finally it was transferred into sacks and placed on the backs of burros that hauled it the final stretch into Silver Peak and the mill.

The Mohawk Mill only operated about one year, but the combination of the rich veins in its mines and their location made the whole operation very desirable. Following an apex lawsuit, the Mohawk-Alpine holdings were absorbed into the Blair property, which by then had been sold to the Pittsburg Silver Peak Gold Mining Company.

### THE VALCALDA MINE

The Valcalda claim group was worked for twenty years, from 1885 to 1905. One of the four Valcalda brothers, John, worked the claims just three months out of each year, digging about ten to twelve feet below the surface, gathering the ore, and processing it in a two-stamp mill or by hand with a mortar. From this work, he reportedly earned \$2,700 one summer—not bad wages in those days. However, it was never the bonanza of the Italian brothers' dreams, until they finally sold their property for \$30,000 to John Lynch (a man whose wealth came from the Mizpah Mine in Tonopah) and Billy and Mike O'Meara. The money from the sale came too late to fulfill the dreams of one of the brothers, whose sad story captured the attention of *Sunset Magazine*, December 1906:

[T]hree Italian brothers . . . were compelled to work their mine in most meager method; and to do many other things which might bring in the dollars so needful to their support. They burnt charcoal, cut wood, drove teams—did most anything, in fact, which would fetch an honest penny; confident ever that someday their mine would bring them in a fortune which should compensate them for all their hardships. It came finally; through the sale of the Valcalda to Lynch and Omeara; then the oldest of the brothers made happy preparations to return to Italy but before he could get out of the state Death came and gathered him to that shore from whence there is no return. 31

Lynch and the O'Mearas revitalized the Valcalda holdings, building a five-stamp mill and a four-mile pipeline from the Red Mountain Spring.<sup>6</sup> The pipeline fed water by gravity into the fifty-ton mill to which another ten stamps shipped from Colorado, were added. Both amalgamation and cyanide were used, a hybrid of 1907 technologies.

At the Valcalda Mine, good jobs were available. Records show "in 1908 the mine employed a foreman, a teamster, three machine men (drillers/ miners), two muckers, a chuck tender, a blacksmith and his helper, two cooks, a compressor operator, hoist operator, and one man who kept development work up to date on the company's other claims." None were listed simply as "miner." Even a forty-five-horsepower Peerless automobile was brought on site to speed communication between the mine and the office.<sup>7</sup>

After less than a year, in 1908, Samuel Newhouse (once described as the richest mine operator in Utah) bought the Valcalda Mine and announced grand plans for expansion which never materialized. The following year he sold the property for \$150,000 to the Pittsburg Silver Peak Mining Company.

# THE PITTSBURG PLAYERS

Over the next ten years the Pittsburg Silver Peak Mining Company would bring only the best to the area. The newest machines and modern electrical power would automate mining and milling. The luxuries of water, electricity, and an underground sewer system would all be piped directly into the homes.

Finally, the long awaited news came. When the Pittsburg Silver Peak Gold Mining Company bought Blair's forty claims from John Blair's son, DeWitt Clinton, the \$750,000 sale was announced on May 9, 1906. During this time a man named Martin L. Effinger, who came to Nevada from the Utah mines, made his mark in the area. He was credited with attracting the eastern investors and finalizing the sale, assisted by a Dr. Edward I. Bowes of Tonopah. Afterwards Effinger remained as resident director to oversee the whole Pittsburg operation. *The Silver Peak Post* of June 6, 1906, praised Effinger's work:

To sell a mine for \$750,000 cash, organize a company, perfect a consolidation with adjoining mines, see \$700,000 cash placed in the new company's treasury, arrange for a campaign of operation larger than had ever been attempted in the State since its revival and push out into the field again, all within thirty days, is something that is not done every day in the mining world. That, however, is just what Martin L. Effinger, the well-known mining man, has accomplished since he left Tonopah for Pittsburg (sic) and New York one month ago.

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# ARCHAEOLOGICAL STUDY

Records show the Valcalda Mine was never as fully developed as the Mary Mine, and because of its isolation it has always been considered a male domain. However, a recent archaeological study uncovered artifacts left behind by a woman who lived there around the turn of the century, probably just before or during the Pittsburg Era. A 1903 Liberty Head dime minted in Philadelphia helped set the date for artifacts.

Who this woman was remains a mystery, but a decorated lid to a porcelain sugar bowl may have been one of her few treasures. A 1909 map shows a building that was probably used as a home by the superintendent, so perhaps he was a married man. Among the items found were a Cheeseborough-Ponds Vaseline bottle (c. 1880-1919) with a cork stopper and the remains of a corset—garter clasps and fasteners. Other items included a cookstove and canning jars, cans for food, tins for tobacco, and bottles such as one manufactured by Adolphys Busch Glass Manufacturing Company (c. 1904-1907) that would have contained alcoholic beverages, most often beer. Thus, the superintendent's house was the center of domestic activities, while artifacts from mining activities were, for the most part, located elsewhere.<sup>8</sup>

The new owners of the company were all prominent Pennsylvania businessmen and politicians, such as wealthy Pittsburgh steel manufacturer Charles Schwab<sup>9</sup>; steel magnate and U.S. Senator George T. Oliver<sup>10</sup>; and William Flinn, who was a newspaper publisher and Pennsylvania state senator.

These were rich and powerful men, capable of backing their vision for Silver Peak's mines, and their vision was a marvel. It centered on the latest that technology had to offer for mining and milling operations. Their one hundred-stamp mill would be the largest in the West, and their cyanide operation near the Mohawk-Alpine Mill in Silver Peak would process the old tailings on their property, wringing even more value out of waste. The mines would have the latest in electrical lights, locomotives, and telephones. A 3,800-foot tunnel was designed to connect the Mary and Drinkwater mines, and a 14,000-foot aerial tramway from the mine to the mill would carry the heavy ore with ease. A 17.5-mile railroad would hook up with the Tonopah and Goldfield Railroad, connecting the isolated community with the outside world's vital trade centers. Every part of the plan would increase the volume of material mined by increasing the efficiency of moving and milling the ore. 33

But as with all revolutions, when old gives way to new, this one contained one big surprise. When these marvelous plans were unveiled, they were not for Silver Peak. Rather, a company town named Blair would be built just two miles to the north. The whole project was so top secret that the company had staked out the new townsites at night.<sup>11</sup>

Blair was the town destined to become one of the most modernized company towns of its day, not Silver Peak. Blair would have the carefully laid out streets built to accommodate the newfangled automobiles. Blair's homes would have electricity, running water piped directly into the kitchen, and a modern, underground sewer system—no more need for outhouses.

Imagine the shock and disappointment. Blair's location challenged the very survival of Silver Peak even more than the economic woes of the 1890s. *The Goldfield Review* (July 5, 1906) blamed Silver Peak speculators for pushing the Pittsburg operation into creating its own town, stating, "Exorbitant Demands of the Residents of Silver Peak Cause Mining Company to Lay Out New Townsite."<sup>12</sup> Chiatovich, Vollmar, Wasson, and Shirley must have held out some small hope for the town of Silver Peak, but Blair quickly stole the show.

#### BLAIR, A MODERN TOWN-1906-1916

The futuristic visions investors held for Blair were marvelous, and little time was wasted implementing them. Most were completed in one year or less! The population of Blair exploded to 1,050 within its first year, while Silver Peak's population rose more slowly to a mere 250 people. In the summer of 1906, tent houses blossomed in the desert and were quickly replaced by 100 wood-frame houses, all built within a month to house 700 people. More miners were housed in the barracks near the Mary Mine portal. Businesses arrived offering all the necessities—the Blair Hotel, the Blair



"Businesses arrived offering all the necessities." Blair, Nevada, c. 1908-1909. (Photograph courtesy of the Central Nevada Historical Society.)

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Mercantile Company, a drugstore owned by a Dr. Cox, a meat market, furniture store, saloons, the Wells Fargo Express Company, and the Western Union Telegraph Company line—all were established within those first few months. Blair even offered a school (1907 to 1916), a newspaper, and a clubhouse.

The new town had its problems. *The Tonopah Bonanza* reported that "Claim jumping has begun by three new arrivals and word has gone out that such acts will not be tolerated."<sup>13</sup> Opportunity often draws community-minded individuals and scoundrels alike. But once buildings were in place, the little company town of Blair settled in for what most hoped would be a successful run.

Betting men thought Silver Peak residents would abandon their homes for the new, modern company town, but by May 6, 1907, the *Tonopah Sun* reported:

... nothing of the kind has happened, nor is likely to .... Silver Peak as a mining camp has a good excuse for its existence, else it would not have withstood the onslaught of the knocker for lo! these forty years.

Indeed, the 1910 census revealed growing differences between the two communities.<sup>14</sup> Blair obviously became the more polished of the two towns. People living in Blair commanded some of the area's best jobs. Most were young workers between the ages of twenty and forty, who worked in a variety of milling jobs (mill workers, assayers, carpenters, or managers) or in mining-related jobs such as the railroad. Almost anyone could find work in Blair because so many different skills were needed. Jobs ranged from domestics (housewives and laundrymen) to professionals (doctors) and businessmen (blacksmiths and merchants).

Although most Blair residents were American-born citizens, some were immigrants from Canada, Russia, China, and Europe (representing Italy, France, Germany, Great Britain, Ireland, Sweden, Norway, Denmark), all living next to each other. Segregation did not appear to exist. Of course, the town was so small it would have been difficult to create the "Little Italies" or "Chinatowns" of larger cities.

In contrast, few Silver Peak residents worked in the mills. Most were miners or housewives and domestics (lower-paid jobs), and nearly one fourth of its population was school-age children. Less than half of all residents in the entire area were immigrants, yet most of the Chinese, Hispanics, and Native Americans settled in Silver Peak.<sup>15</sup>

Several satellite communities grew near the mines and depended on Blair and Silver Peak for supplies and services. One was at the Valcalda Mine, according to an early map.<sup>16</sup> Living quarters included housing for a superintendent, two other frame houses, a boardinghouse, a bunkhouse, and a tent house. Residents of these were served by a school and by water storage 35

# SILVER PEAK VALCALDA PAYROLL RECORDS

POSITION Foreman Blacksmith Machine operators	PAY/DAY \$6.00 \$5.50
(Compressor operator, pump men, hoist men)	\$5.00
Timber men	\$4.00 - 4.50*
Machine operators (Miners & drillers)	\$4.00 - 4.50*
Chuck tenders	\$4.00 - 4.50*
Blacksmith's helper	\$4.00 - 4.50*
Teamsters	\$4.00
Chinese Cooks	\$2.42

\*Wages varied based on whether the worker was in the mine or outdoors. Also, these day-wages were based on a 365-day working year—no paid holidays or vacations and no weekends off. Out of these wages, the men paid \$1 per day for board.<sup>17</sup>

# COST OF GOODS IN SILVER PEAK, NEVADA (c. 1905)

PRODUCT	COST
Bottle of beer	\$.50
Bottle of whiskey	\$ 1.25
Gallon of syrup	\$ 1.75
Restaurant plate	\$ .30
Box of caps	\$.90
50 lbs. powder	\$12.00
200 ft. fuse	\$ 1.80
Can of Sardines	\$.25
12 Cans of Milk	\$ 2.00
1 pair of "drawers"	\$ 1.25
1 pair of overalls	\$ 1.00
1 pair of socks	\$.25
1 box .30-30 cartridges	\$ 2.00
500 lbs. flour	\$19.00
20 lbs. corn meal	\$.75
Shot of whiskey	\$ .12
14 lbs. coffee	\$ 4.20
Bulk beef per lb.	\$.09
Sack of flour	\$ 2.50
Bacon per lb.	\$.25

From a ledger in the Silver Peak Mercantile Collection at the Nevada Historical Society.  $^{\rm 18}$ 

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tanks. The mine complex consisted of a hoist house, cyanide building, carpenter shop, blacksmith shop, office, and mill. A transformer building confirmed that electricity ran the operation, although it may not have been available in the homes.

Of special interest at Valcalda was the blacksmith shop, which was probably in business during the Pittsburg Era from 1906 to 1916. During that time almost all surrounding properties were being worked by the Pittsburg Company, as well as a few independent owner/operators. That combination would have provided plenty of work for an independent blacksmith. There is some speculation that the shop may have been built by the owner of the Lucky Sam claim. Crucible fragments and an assay spoon suggest the smithy doubled as an assayer, but there were also the usual files, whetstones, pieces of metal, hooks, hinges, harness fittings, and horseshoes—all to be expected among artifacts for a blacksmith shop. One pneumatic drill bit was found by archaeologists, one that was never sharpened and returned to the mine. The smithy's building was well-made of stone and built to last for several years. A nearby wood-frame building could have served as "home" to the blacksmith.

Another small community flourished next to the Mary Mine where 60 percent of the residents were men and lived in the boardinghouse. Only 55 percent were American-born, which again meant more immigrants lived and worked near their jobs than in Blair. A small community, the Mary Mine camp was still larger than the Valcalda camp. It offered a clubhouse called the "Pool Palace," a post office, and (briefly) both a school and a hospital. In addition to the bunkhouse and boardinghouse, there were tent houses and two classes of cottages or frame houses<sup>19</sup> which may have reflected some social divisions based on job status. The mine complex included a carpenter and blacksmith shop, compressor house, oil house, aerial tramway and tram station, hoisting works, and transformer buildings (again, electricity was used), and a car shop which was likely used to repair tram cars.

Other satellite camps were located at Carr Camp, Coyote Springs, and Gulch. By today's standards, life in these small communities would be considered harsh. The men worked seven days a week, 364 days a year, with only Christmas day off. The few women who lived there kept house without running water or indoor bathrooms. Yet new information shows that life was comfortable if measured by the standards of those days. A look at the following tables shows the pay scales from the Silver Peak Valcalda payroll records and a list of supplies with prices from the Silver Peak Mercantile ledger. People could earn enough to buy necessities from among the many "goods available to Americans during the early twentieth century ... through the mass marketing and distribution systems that were in place ....."<sup>20</sup>

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### **TECHNOLOGY TAKES OVER**

Once plans for Blair were underway, Effinger began work on the Pittsburg Company's mining and milling operation. The survey for the Silver Peak Railroad Company (Effinger served on its board as secretary/treasurer) was completed in one month, and by August of 1906 six miles of grade were ready for ties and rails. By October 15 the entire 17.5 miles of track were laid, built by the same company that built the Tonopah and Goldfield Railroad, and the first train pulled into Blair with a load of lumber the very next day.

Construction on the huge new mill also started without delay. This mill mixed the old with the new, adding cyanidation as a second step to the traditional amalgamation treatment. The company's fire insurance application listed a crusher building and plant located at the terminal of the tramway, along with the mill, carpentry and machine shops, and a stable. The mill itself was built entirely of steel with 20 stamps to each unit and a total of 100 stamps in all 5 units. Later, the final 20 stamps were removed from the Valcalda Mill and added to the Blair Mill. Driven by 50-horsepower, Bullock-type motors, each 1,150-pound stamp pounded the ore 94 times per minute. The Merrill-Crowe process was used in the cyanide plant. By 1908 the mill was completely powered by electricity and over a tenmonth period averaged 10,000 tons of ore crushed per month at a value of \$10 per ton. By 1911 the mill was crushing more ore—15,500 tons a month—but by then the values had dropped to \$6 per ton.

The partially finished mill began operating in October 1907, and, when completed March 1, 1908, it could process 540 tons of ore each day.<sup>21</sup> The mill was recovering an incredible 93 percent of the precious gold between the amalgamation and cyanide processes, in addition to the Silver Peak cyanide mill which reprocessed tailings from old mill dumps.

Of course, the mine was also being developed at the same time that the town of Blair and the gigantic mill were rising out of the desert. The Blair mining properties (owned by the Pittsburg Silver Peak Mining Company) included nineteen patented claims, fifteen Mohawk-Alpine claims including the Mary Mine, ten claims that were used for the town and the mill, and many other unpatented claims that were added over the years.

By far the richest of all were on the Drinkwater and Crowning Glory veins, which ran parallel to each other and were intersected by the Mary Tunnel. When the Pittsburg operation took over, most of the previous work on these veins had been done by hand. *The Nevada Mining Investor* (December 1, 1906) described what they found:

In the workings at the end of the Mary tunnel, huge deposits of ore are in plain sight. The methods of the old management were not those of orthodox mining. When ore bodies were discovered they "went to it" in a manner that would do justice to the stoutest Nevadan. Levels were disregarded and the stoping work was more in

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the nature of quarrying rather than mining. As a result large chambers have been left which in point of dimension would do credit to the famous Mammoth Cave. Enormous pillars of rich ore have been allowed to remain to support the workings.

This was similar to the "room and pillar method commonly used in coal mines during the late nineteenth and early twentieth centuries," according to Steven Mehls.<sup>22</sup> Leon Hill in his oral history described this style of mining:

... they hit this great big stope of ore. It was tremendous. Well, they wanted to get all of the values out that they could, so they mined that all the way up to the hanging and all the way down to the foot, so they were getting about all of the ore that they could get—of the high grade ore, because you had to have high grade in those days at twenty dollars ... instead of putting in timber like they so often do in a lot of mines, they were leaving these large pillars ... until pretty soon they exhausted this big ore body. So then they started to back out, and they started taking the pillars as they backed out .... They were just as valuable as some of the others, maybe more so, because it might have been right at the heart. Anyway, well, I think finally they got so many pillars out that the darn thing caved in.<sup>23</sup>

Those early-day drifts and tunnels were quickly expanded to suit modern technology. The first job was making room for the newer, larger equipment necessary to keep the hungry mill supplied with ore. For example, the Mary Tunnel was widened back to 800 feet where it struck the main drift in order



"The town of Blair and the gigantic mill were rising out of the desert." Blair, Nevada, in 1907. (Photograph courtesy of the Central Nevada Historical Society.)

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to accommodate a double-track rail line for a locomotive. To connect the Mary and Drinkwater mines, a 3,800-foot tunnel was drilled using pneumatic drills powered by compressed air and using water to dampen the dust. The goal in extending the main drift of the Mary Tunnel was to reach a point directly under the rich Drinkwater, Crown, and Crowning Glory veins and connect them with a winze to make removing the ore easier and more cost-effective.

A contract with the new Nevada Power, Mining and Milling Company (predecessor to the Nevada-California Power Company) meant electrical power where it was needed and a substation located in Silver Peak.<sup>24</sup> On Bishop Creek in California a hydroelectric generating plant was built and the transmission lines reached Silver Peak sometime between 1905 and 1908, about the same time the first telephone lines arrived. The combination of discoveries at Tonopah and Goldfield and revitalization of the Mineral Ridge Mining District offered enough incentive to bring electricity to the area.

In fact, electricity made the whole Blair experiment possible. The Pittsburg group's large-scale mining operations could never have been realized without this "milestone" in technology.<sup>25</sup> The *Blair Press* editor toured the company's underground mine and gave this firsthand account of the industrial-age wonders:

We rode on an electric railway into the tunnel a distance of nearly 13,000 feet, the entire tunnel being well lighted by electricity . . . . In the five miles, roughly estimated, of workings in this mine every possible appliance to aid in rendering the lives of the employees safe is in use, and a rigid system of discipline is enforced to avert accidents. At various stations an automatic block signal system of electric lights guides employees going to and coming from their work.

A thorough telephone system affords quick communication to all the main workings  $\dots$  .<sup>26</sup>

He also mentioned the two-story bunkhouse, complete with a club on the first floor. Even hot and cold running water was available from the company's central steam plant that heated all the buildings and the mine. This ensured hot baths for the miners, previously a luxury.<sup>27</sup>

The age of automation had arrived. Ore cars ran on rails out of the mine and were dumped into loading chutes. From there, ore was transported by an electric locomotive pulling rail cars to the crushing plant. After being crushed, the ore was dumped automatically from the 400-ton bin and loaded automatically into 3-ton buckets on the aerial tramway which gravity pulled in a straight line down the mountain to the ore bins and crushers at the mill. What a sight to see—14,000 feet of wire from which 124 heavy ore buckets seemed to free-fall for 1,600 feet. In little more than a half-hour, 45 loaded

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cars carrying 110 tons of ore could travel from the mine to the mill. It all seemed perfectly orchestrated to feed the huge appetite of Nevada's largest mill and to make a profit.

Such a pace was thrilling, vet the challenge remainedmining enough high-grade ore. Efforts to reach that goal faltered. The company added a 1,400-foot inclined tramway that enabled two, four-ton skips to carry ore from the Drinkwater down to the Mary Tunnel-a shortcut to the aerial tramway. An additional forty men were assigned to shovel ore from the old dumps down the chute of the glory hole, now that the new cyanide process could extract still more valuable ore from old tailings.



"After being crushed, the ore was dumped automatically from the 400-ton bin and loaded automatically into three-ton buckets on the aerial tramway." (Photograph courtesy of the Central Nevada Historical Society.)

Then the company acquired the Valcalda Mine in 1909, ran a rail line, connected it to the upper level of the Silver Peak Mine, and moved 20 stamps from the Valcalda Mill to the Blair Mill increasing the total to 120 stamps. From 1908 to 1915, about 1 million tons of ore were processed at a value of \$5 million, but, ultimately, the race to feed the huge mill was lost. Ben Viljoen told the story that has been passed down through the years:

... the grade of ore here in those times was so low grade that they had to make up for it in volume in order to show any kind of a profit. So they [Pittsburg Company] geared their mill at 500 tons a day, which was more than the Mary was able to produce at any kind of grade. In order to produce a .3 head grade, they could only produce about 300 to 350 ton a day, and the mill demanded 500. So the only way they could bring up enough mill feed to keep the place operating was to lower the grade. It was an unacceptably low-grade ore that was being shipped to the mill, and finally they went broke. Another problem they had is the mill was built in the infancy of the cyanide method, so it was an antique before it even operated.<sup>28</sup>

Hard-pressed to keep the mill operating at capacity, the miners sent every kind of rock they could find mixed with the high-grade ore. That kept

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The Pittsburg Silver Peak Mining Company mill in Blair, Nevada, c. 1910. (Photograph courtesy of the Central Nevada Historical Society.)

the mill fed but not producing a profit. Average ore values fell to \$5 per ton in 1914, and the whole operation was shut down in 1915 with the last ore milled in early 1916.

#### PITTSBURG EMPIRE CRUMBLES

For ten years Silver Peak seemed to be losing ground while Blair kept gaining. Even though Blair's population had dropped to 366 in 1910, that was still considered a stable core and could keep the Pittsburg operation running.

One blow to Silver Peak came when its only school closed between 1903 and 1906. It lacked students, so one elementary school was built near the Mary Mine portal in 1909 and another at Blair in 1910, but not without a fight. Surprisingly, the conflict was not between Silver Peak and Blair inhabitants. Instead, Blair residents accused two school board trustees, N.H. Mix and H.G. Knight, of showing favoritism in awarding construction contracts. Mix and Knight also planned to build the school one and a half miles north of Blair, against the wishes of the townspeople. The controversy reached the courts, and the citizens won. The Deputy State School Superintendent attended the hearing and agreed the school should be located within the boundaries of Blair. Silver Peak students attended the Blair school as late as the 1916 and 1917 school year.

Now, while Silver Peak had weathered the competition, fabulous Blair started experiencing several problems. One came as the result of a fire. For several years the modern Blair Hotel building had been the shining cornerstone of the community. Owned by J. Grant Crumley and Co.<sup>29</sup> and designed by architects Hollsworth and Curtis, the two-story building originally cost \$35,000. Each of the twenty-eight guest rooms offered a private bathroom and toilet, and the entire building was warmed by steam heat. The first floor had a lobby, bar, club room, dining room, and kitchen. For all its beauty and elegance, nothing could save it from the fire that swept through it on July 25, 1910. It was never rebuilt, even though the owners claimed a \$25,000 insurance payment.

Then, too, not everyone found the one-company town palatable. One naysayer was W. W. Booth, editor of the *Blair Booster*.<sup>30</sup> On March 13, 1907, just three short months after his arrival, Booth had had enough. As he left town he took a parting shot at Martin Effinger in the paper:

This is a one-man town. I am informed that Mr. Effinger, the one man, has an interest in nearly every possible mercantile proposition. For the good of the town I trust that he has overlooked the sunset (redlight) district.

And finally, a scandal, often referred to as the Bullion Tax Episode, tainted the company's success. Indictments by the Esmeralda County grand jury were handed down against the officers and directors of the Pittsburg Silver Peak Gold Mining Company for conspiracy to defraud. Civil suits were filed seeking \$5,000 in unpaid bullion taxes, and among those named were Oliver, Flinn, and Effinger. The dispute arose because the law required a \$2.35 bullion tax per \$100,000 net revenue to be paid to the state and the county. Although the company earned \$251,000 in gross revenues for the first quarter of 1909, it claimed a profit of only \$8,221 and said it owed no more than \$193.

The conflict erupted in fisticuffs. "Manager Juessen, surrounded by thugs, attempts an assault upon the State Bullion Tax and License Agent of Nevada in the lobby of a Reno hotel," the newspaper read. Reporter J. L. Considine, in this story for *The Reese River Reveille* of Austin, named the thugs "the Pittsburg Silver Peak gang" and called them "anarchists." Evidently, the "gang" settled the matter out of court by splitting the difference, and Pittsburg Silver Peak Mining Company eventually paid \$2,500 in bullion taxes.

Despite these occasional, colorful conflicts among its citizenry, and even with a declining population, Blair continued to overshadow its neighbor. The post office was moved to Blair between 1913 and 1916, a move that seemed to toll the death knell for Silver Peak, when in reality the Pittsburg Company was gripped in a life-or-death struggle. By 1915 the group was no longer turning a profit, and all operations were shut down. A year later the mill was dismantled and its equipment sold. By 1918 the new and modern company town of Blair was deserted, and the once-welcomed railroad was abandoned. 43

Meanwhile, and seemingly against all odds, the town of Silver Peak survived. Locals watched Blair sink into the desert, becoming just another of Nevada's many ghost towns.<sup>31</sup> A retrospective article published on March 27, 1936, in *The Goldfield News and Weekly Tribune* told of the demise of the Pittsburg Silver Peak Company, complete with the moral of the story:

The old Pittsburg Silver Peak Company, operated by a group of Pennsylvania political notables whose cash resources seemed without limit but who finally took a lesson in economics, spread themselves on one of the biggest mill and mill investments in Nevada [up to that time].

Failing to make a profit with a one-hundred-ton mill, they were advised by New York engineers to increase the mill capacity . . . making the Silver Peak mill at their Mary mine (Blair) the largest in Nevada, and the bragging of their big-scale operation, while the mine foremen, faced with the necessity of feeding an inefficient plant, were breaking more waste than ore . . .

Finally, after the "big shots" had written off a loss in big figures, Fred Vollmar, born and raised in the district, proud of his pioneer ancestry, took the whole works in hand, defeated the chiselers, worked with his hands and head to produce bullion and finally today has a one-hundred-ton, the last word cyanide plant running.

Nevadans taught the Easterners a lesson that became Silver Peak's theme: "Don't try to mine our country without us."

# SILVER PEAK SURVIVES

Silver Peak survived. Residents watched an economic recession come and go during the 1890s, that made the Klondike Strike of 1899 especially enticing to many miners who headed north to Canada. Also during the 1890s, Cripple Creek, Colorado, was becoming the "world's greatest gold camp," another attraction. Still, hard-core Silver Peak residents held fast to their belief that riches remained right near their homes. Unlike some Nevada mining camps that seemed to last no more than an historical heartbeat, Silver Peak had already survived more than five decades by the end of the Pittsburg Era.

Water was still plentiful. Trees carried from Cottonwood Spring and Creek (about a mile west of the Nivloc Mine) were planted in Silver Peak back in 1884 and had survived. The Silver Peak spring had fed 300,000 gallons daily to the town of Blair and its hungry 120-stamp mill. Valcalda Springs served the Valcalda Mill and later the Gordon-Brodie Mill. Mills located right in Silver Peak drew groundwater, and the Clayton Valley playa held enough water during springtime and early summer months to draw migratory birds and even a few boaters.

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Life was seldom boring in Silver Peak. Enough residents were on hand and enough water was available in 1907 to throw a Fourth of July celebration featuring a boat race on the "lake."<sup>32</sup> If that wasn't excitement enough, newspaper reports of two miners murdered just three miles west of the "new Cottonwood district" near Silver Peak roused the community. Esmeralda County Sheriff Ingalls formed a posse to locate the men's missing burros:

The people of this community are wrought up over the murder, as both the prospectors were well known here, and if the murder (sic) or murderers are brought in here, they are apt to be summarily dealt with.<sup>33</sup>

A less violent but equally fascinating incident drew comment when Lillian Malcolm, a woman prospector and promoter, successfully financed a property at Coyote Springs in the Silver Peak district:

"I raised the money in Pittsburgh," said she, "and I had no trouble in doing it, which goes to show that there is a great deal of bugaboo about this talk of hard times and stringency of the money market. There is plenty of money to be had for legitimate propositions, if one is sincere in his or her motives. When one goes to business men, all that is necessary is to talk common sense. But if one is going to take romantic flights, and go up into the millions on an ordinary proposition, he is going to fall short of his expectations."

"Our company has been called the Scotch Lassie Gold Mining Company, and we have already started work upon it. The offices are located in Pittsburg (sic), in the Columbia Bank Building, the same building where are located the offices of the Pittsburg Silver Peak Company."<sup>34</sup>

Lillian Malcolm grew up in the eastern United States and started a career as an actress on Broadway until gold fever struck. Then Lillian packed up her show costumes and headed north to Canada and the Klondike gold rush in 1899. She began life anew and prospected for gold, a job generally considered to be for men only. She was one of a handful of women who joined this man's world.

Alone, she took a sled and dog team over the treacherous Chilkoot Trail to Dawson. A death-defying feat, it was not the only adventure she encountered. She also accidentally slipped into a frozen river while jumping between chunks of floating ice, then at one point came near to starvation when she ran out of provisions. She wore a pistol in her belt but was not able to fend off the men who jumped her claim in Alaska. After a year-long court battle failed to retrieve her claim, she left Alaska—completely broke but not discouraged. 45

As far as we know, Lillian was always a little bit too late, never striking the big bonanza. However, she seemed aware of her role as trailblazer for other women to follow:

The grandest and healthiest life known is this rough pioneer life. And I don't see why more women are not out in the hills. It ought to be as easy and natural for women to read rocks as it is for astronomers to read the stars. The day will come when they will not sneer at Miss Malcolm. They will not pick up their skirts when I come around. Disgusting conventionality must pay the penalty in any pioneer work . . . . Woman can endure as much as a man. Comply with the law and you will have man's responsibilities and man's reward.<sup>35</sup>

However, she also knew what it was like to be rejected by other women:

... the criticism I received from my own sex when I first began to prospect. I would notice as I passed down the streets of a mining camp, in my tallow spattered khakis, the wives of struggling clerks and other low salaried men holding their garments aside as though I might contaminate them. My pride prevented my turning back.<sup>36</sup>

From Alaska, Lillian traveled to Nevada to join the new gold and silver strikes at Goldfield and Tonopah in 1902. Since she had no money, she paid for her room and board in Tonopah by telling stories of her Alaskan adventures. She tried to locate gold near Silver Peak in Esmeralda County, staked a claim, went to Pittsburgh to raise money from eastern investors, and formed a company called "Scotch Lassie Gold Mining Company." When she returned, *The Tonopah Bonanza* reported her success in raising funds on November 2, 1907: "She is a hustler of no mean ability, and has done prospecting on her own account, both in Nevada and in Alaska."

Unfortunately, her Silver Peak claims did not pan out. When her Silver Peak property failed to show value, Lillian continued to travel in search of the gold she always believed she would find. After living in Rhyolite and Mexico, she moved back to northern Nevada and worked in the Slumbering Hills Mining District. In 1911 she moved to Jarbidge in northeastern Nevada and continued her prospecting. From there she may have moved out of state, possibly to Arizona and California.<sup>37</sup>

# QUIET TIMES-1917-1928

When the Pittsburg operation stopped in 1915, the silence must have been as deafening as a curtain call without applause. The sounds of blasting, drilling, and mucking tons of ore, the rumbling of ore cars on rails, the whoosh of ore buckets sliding down the aerial tram, and the constantly pounding 120 stamps of the big mill were replaced by the occasional sound of

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Pittsburg

a wagon or car and the distant ring of the leasers' picks. Once more, lone miners chipped away at the ore in deserted mines. Blair faded quickly into the desert, leaving only a faint trace of the streets and a few artifacts. But as the newspaper had prophesied, Silver Peak had a reason to remain—at least the seventy-eight people recorded by the census in 1920 must have thought so.

Gold production across the state was in a decline during the 1920s and demand shifted to by-products of gold, such as copper. That brought the copper mines of Ely into the limelight.<sup>38</sup> Left without eastern financial backing or new discoveries, all the technology in the world could not save the Silver Peak Mining District now.

Like bit players leftover from a touring road show, owners dropped their claims and left town or stayed on merely to maintain the assessment work. The entire area hunkered down into its earlier survival-of-the-fittest mode. By 1926 the fittest once again numbered just ten, and perhaps none of them would have bet odds on the little mining town's survival the day the stock market crashed in October of 1929.

While the entire country dropped into the Great Depression years, mysteriously, Silver Peak never withered into the desert. Never a ghost town, the explanation for its survival seemed to lie, over and over, in that magic combination of cash from eastern investors coupled with Nevada knowhow—local miners who implemented new mining and milling techniques, adapting them successfully to fit local conditions.

Then the 1930s arrived along with a new local hero. Fred Vollmar Jr., equal parts miner and promoter, charged in and out of town by air or auto, becoming Silver Peak's white knight. He delivered new investors, new life, and new hope to the town and its people.

Notes

1. The University of Nevada, Reno Special Collections Department has a stock certificate from the Pittsburg Silver Peak Gold Mining Company, and the company name is spelled without an "h".

2. Griffin said electricity was available at the Mary Mine and mills before it reached residences, so oil lamps were used in the homes. Ruby Griffin, conversation with author, 1996.

3. WCRM, 3-15. In comparison, prior to 1906 Silver Peak's production reached only about \$1.4 million.

4. The Tonopah Daily Sun, 29 May 1906.

5. Shamberger, 22.

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6. WCRM, 5-54. The skeleton of this pipeline can still be traced across the ridges from Red Mountain to Valcalda Springs and may be the pipeline Jack Brodie mentions in his oral history.

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7. WCRM, 18.

8. WCRM, 5-16.

9. Charles M. Schwab was born in Williamsburg, Pennsylvania, in 1862 and died in 1939. He entered the service of the Carnegie Company and became president of Carnegie Steel Co. Ltd. then President of U.S. Steel Corporation from 1901 to 1903 and Chairman of the Bethlehem Steel Corporation. He was also the Director of the American Iron and Steel Institute. *The National Cyclopedia of American Biography* 14 (New York: James T. White and Company, 1917), 68-69.

10. George Tener Oliver was born in Ireland, January 26, 1848 and died January 22, 1919 in Pittsburgh, Pennsylvania. He was an attorney who retired from that profession after ten years in practice and engaged in steel manufacturing until 1901 when he sold his interests. From there he became a newspaper publisher of the *Pittsburgh Gazette-Times* and *Pittsburgh Chronicle-Telegraph*. He served as a U.S. Senator from Pennsylvania from 1909 to 1917. *The National Cyclopedia of American Biography*, Chapter 2.

11. Zeier, 8.

12. Shamberger, 52. More likely, as historian Shamberger noted, the ambitious M. L. Effinger simply wanted to control everything—the mine, the mill, the town, and the men. He was, after all, a man of his times, and such efforts were common among the new wave of industrialists seeking to increase their power over working men, which eventually brought a reaction in the form of organized labor unions.

13. The Tonopah Daily Bonanza, 30 October 1906.

14. WCRM, 3-21 to 3-23.

15. WCRM, 3-22. A sad note is that 30 percent of the mothers who lived in Blair reported a child who had died—not an unusually high number for mining towns of the day. For more details on childhood deaths see Hill, Cooper, and Mattei oral histories.

16. WCRM, Chapter 5. Artifacts from a woman resident led to speculation that at least one superintendent's wife lived at the Valcalda Mine, too.

17. WCRM, 3-25

18. Cited in WCRM, 3-26

19. Listed as Class A or Class B, these designations may have been for fire insurance or some other legal designation.

20. WCRM, 3-24-26

21. Today 540 tons of ore would amount to little more than two truckloads in some of the huge haul trucks used in open-pit mining.

22. Mehls, phone conversation with editor, August 1998.

23. Ford, Leon Hill oral history, 64-65.

24. Electricity certainly was not new. It had been proven successful in Colorado mines and others around the West, but the problem was cost—how to generate and transmit electricity from the source to the consumer in a cost-effective way. In an 1892 to 1893 experiment at Bodie, not far from Silver Peak across the California border, a man named L. L. Nunn proved a power plant and transmission system could carry direct current (dc) electricity to the mines. Alternating current (ac) could also be carried more than two miles from a hydroelectric power system to a mine. Both experiments took place before the turn of the century. Emil W. Billeb, *Mining Camp Days* (Berkeley, CA: Howell-North Books, 1968), 152-154.

25. WCRM, 3-20.

26. The Blair Press, 3 September 1909.

27. Ford, Leon Hill oral history, 84-85. See Hill's description of miners bathing in the reservoir or making a homemade shower.

28. Ford, Ben Viljoen oral history, 203.

29. This company also included the ever-present Effinger. Shamberger, 55.

30. Booth edited the *Tonopah Bonanza* and also published the *Silver Peak Post*, the newspaper that became the *Blair Booster*. Shamberger, 53.

31. In 1996 only a few artifacts remained at the Blair town site: a manhole cover from the once-modern sewer system, a cement foundation for what locals believe was the elegant Blair Hotel, and the ghostly outline of streets that from a distance look as though space aliens once played a game of tic-tac-toe there.

32. Shamberger, 35-36.

33. Tonopah Bonanza, 22 November 1907.

34. Tonopah Bonanza, 2 November 1907.

35. Zanjani, 94

36. Zanjani, 100-101

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37. Bibliographics	ıl synopsis drawn	from Zanjani,	89-95, 99-103.
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50 | 38. Zeier, 9.

PART II The Vollmar Years, 1928-1942

# 3 Fred Vollmar Jr.

## THE HEYDAY

The Great Depression struck a hard blow to towns across the nation but seemed to skip Silver Peak. Instead, the 1930s became the heyday, often called "the Vollmar years" for Fred Vollmar Jr.. Evidently "Fritz" pumped new life into the town of Silver Peak in more ways than one.

Born and raised in the area, he moved away for a short time then rejoined his father in 1927 at a time when mining was in the dumps, so to speak, at Silver Peak. Whether he was away at school or to seek his fortune is unknown. His return was simply noted in a newspaper article without further explanation, yet to this day Vollmar Jr. is considered one of Silver Peak's legends and its savior. Wasting little time, his name soon popped up on mining records everywhere. He was busy assisting small companies, forming new companies, and enticing financial backing for them all.

Although Fred Vollmar Jr.'s knowledge of mining was solid, it was his ability to attract investors and his dashing style of promoting Silver Peak that caused stories of his adventures to grow to epic proportions. When he climbed aboard an airplane and flew off to parts unknown, everyone at The Peak trusted he would return with more money to ensure their precious jobs in the mines and mills.

At a time when banks around the nation were closing, his legendary feats included landing big-name investors. Among them were E. L. Cord, the famous automobile maker; Tommy "Bugs" Warner, whose fortune was made manufacturing transmissions and gears for General Motors and many other cars and trucks, such as Willys and Overland; the Kelloggs of Los Angeles, owners of Forest Lawn; and Cecil B. DeMille, Hollywood filmmaker.<sup>1</sup> Eventually, his successes in attracting southern California investors justified a Beverly Hills headquarters for the Black Mammoth Consolidated Gold Mining Company, a move that was noted in the company's March 1941 quarterly report.<sup>2</sup>

Fred Vollmar Jr.

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Many mining towns had colorful characters, and Vollmar's escapades certainly entertained locals. But Silver Peak natives also remember Vollmar Jr. as a man of substance. He not only kept miners on the payroll through the tough Depression years, but he was always involved in Silver Peak's social events. On one hand, his passion for betting on horse races was known to all. On the other, he could always find time to toss a football with small boys or to fly a doctor into town to help a sick child. Vollmar is remembered not simply as a character but as a man with a big heart who gained the respect of his community.

Fred Vollmar Jr. was president and general manager of Silver Peak's most successful operation, the Black Mammoth Mine and Mill, from 1927 to 1942. He was also involved in many other area enterprises such as the Lucky Boy Divide Mining Company. He held controlling interests in the Liberty Divide Mining Company, Gold Wedge Divide Mining Company, the Nivloc Mine, and others.<sup>3</sup> It was through these companies that Vollmar had his hand in most major mines in the district as well as several milling operations. Vollmar's companies did not actually own any mines, so he worked mostly on long-term leases from the Pittsburg Silver Peak Mining Company, and within ten years his companies were operating on nearly every claim in the district.

Later *The Goldfield News* would remember his growing reputation and holdings:

When he started in the mining business he was a mere boy. Some of the pioneers in Esmeralda County laughed at him. But Fred has made good. Vollmar is interested in a number of corporations, so many, in fact, that it is necessary for him to now make all business trips to Reno, Los Angeles, Las Vegas, Salt Lake City, San Francisco and other business centers in a privately-owned plane, a landing field for which has been constructed in Silver Peak.<sup>4</sup>

#### VOLLMAR AND CORD

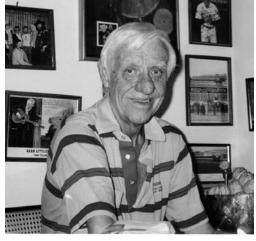
Often Vollmar and investor E. L. Cord were compared. Vollmar is generally credited with drawing Cord into the Nevada mining scene via the Mary Mine. Exactly what transpired between the two men or among Vollmar and his other partners, such as R. J. Carnall, is lost. However, those who spent their childhood, teenage, or young adult years in Silver Peak characterized the two men as opposites. Cord always remained aloof, while Vollmar always played an active part in the everyday life of his community.

Ultimately, World War II shut down the mines and mills at Silver Peak, as it did all across the nation. Even before the war, Vollmar apparently faced financial difficulties, including an investigation by the Internal Revenue Service, the results of which are unknown.

# STEWART CARNALL: THE MONEY PEOPLE<sup>5</sup>

Ronald Carnall and Fred Vollmar Jr. were partners in the Red Mountain Mining Company which was formed in April of 1936 to operate the Nivloc silver mine. Carnall's son, Stewart, recalled adventures accompanying his father on business trips to Silver Peak. Although Carnall describes a brief period of time and his memories are from a child's viewpoint, he clearly sensed the excitement surrounding the two men's promotional activities.

Fred Vollmar and my dad [Ronald "Pete" Carnall] were partners in the Mary Mine, the Nivloc, and the Black Mammoth. When I was a kid, between the ages of eight and twelve years old, we drove to Silver Peak from Pasadena, California, many weekends. We drove up Highway 395 and turned off on the blacktop just before Bishop to go into Silver Peak. We always stayed at Fred Vollmar's house, and his wife [Lois] was a hell of a good cook!



I don't remember any other

[Lois] was a hell of a good cook! Stewart Carnall. (Photograph by Victoria Ford.)

kids around when I was there during the summers, but of course I was like the new kid on the block. My dad took me everywhere with them. We'd go up and check the mines and wander around. I had a miner's outfit, and Fred gave me the gold pan to strap around my shoulders. They let me chip away at the ore, but I didn't know what I was doing. It was pretty spooky underground.

Fred was an outgoing, good guy, and my dad was, too. They were both pieces of work—very different from the run-of-the-mill type person. They didn't take me downtown in Silver Peak too much. My dad might have snuck away, or Fred might have snuck away and gambled on horses. One time my dad took me with him to Tonopah to the Mizpah Hotel. They had wooden boxes of silver dollars there, and he was playing roulette and damn near broke the place. I think he was about \$40,000 in front. By the time I dozed off, he had lost about half of it back to the house.

Fred was a tremendous gambler and kept a room in the St. Paul Hotel in downtown Los Angeles. He kept a personal barber and a personal bookie. In the morning, he would bet a couple hundred dollars at the eastern tracks huge money in those days. After six, eight races back East, he'd go to Santa Anita and bet. We used to go together, and he was really good to me, but he kept saying, "Kid, don't get involved in this. This gambling is a bad deal." 55

Fred Vollmar Jr.



"We always stayed at Fred Vollmar's house." Stewart Carnall and his father walking toward Fred Vollmar's guest house in Silver Peak, c. 1934. (Photograph courtesy of Stewart Carnall.)

But he let me bet. Once he warned me against betting on a race, but I wanted to bet anyway, so I asked one of the cashiers to go partners on a bet. You had to bet \$2, and the horse we bet on was Tobacco Road. We won. Paid \$49.80, so we split half-and-half on that. That's like a windfall for a ten-year-old kid. That's when I got hooked on horses.

My father and Fred Vollmar had nothing to invest. They went out and looked for investors—E. L. Cord, Tommy Warner of Warner tools. They didn't sell stocks at that time; they invested. Dad and Fred would take the investors on hunting trips, and one time I went along. My dad said, "Don't get out of line with these people. They're the money people." [laughter]

It was one of the best experiences of my life. We went up in the Reese River country out of Austin, Nevada. There must have been about twenty or thirty people. We rode horses about ten miles and set up camp by the Reese River. We caught brook trout out of that stream and saw a herd of about 200 deer grazing down below where we were camped. I practiced target shooting to flush the sage hens out of the way. Fred Vollmar loved shooting. He was an excellent marksman. I had no idea who E. L. Cord was. (When I became an adult I knew he had a 50,000-watt radio station in Reno, because later I booked entertainers there.)

Getting people to invest in mining was sensible, because they all made money. E. L. Cord made money. Warner made money. My dad made money. Vollmar made money. What else can you ask for?

Fred was a very gracious man, an amazing man. He was part Indian. He was articulate, and he knew what the hell he was doing: he knew where to find the ore. My dad got the money people. Later we stopped going to Silver Peak. There were problems with the I.R.S. I don't really know the details on that, but we kept in touch with Fred. In later years, 1973 or 1974, when Vollmar was living in Austin, Nevada, my wife and I stopped by and visited him. I said, "Wouldn't you like to be at Santa Anita rather than here?" because he was bedridden then. He laughed.

Fred Vollmar Jr.

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When my father died in 1971, I chartered a plane, took

"I had a miner's outfit, and Fred gave me the gold pan to strap around my shoulders." (Photograph courtesy of Stewart Carnall.)

his ashes, and tossed them over the Black Mammoth Mine along with two winning tickets from a horse race and one red rose. I did the same thing when my mother died, because I thought she would like to be with him. I thought they'd want to be there, because that was the highlight of our life. They made money there, and our life was really good during the 1930s. I never felt the Depression. We had a butler, a Packard car, and a beautiful home in Arcadia, California.



Partners Pete Carnall (center) and Fred Vollmar Jr. (right) take a break in front of a mine site. (Photograph courtesy of Stewart Carnall.)

## LEON HILL: THE WHITE KNIGHT

Fred Vollmar Jr.

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Leon Hill was raised in Silver Peak and Goldfield. His father was Fayette Hill, superintendent of the Black Mammoth Mill owned by the Black Mammoth Company, in which Fred Vollmar Jr. owned a part. Leon's firsthand memories of Vollmar paint him as Silver Peak's economic savior and all-around good guy. In contrast, E. L. Cord bought the Molini Ranch in Fish Lake Valley for tax purposes only, Hill said. He didn't live there and was not involved with the local community.



Leon Hill. (Photograph by Victoria Ford.)

Everyone knew Fred Vollmar. He was kind of a white knight, because he's the one that promoted the whole area's mining business and came up with the money by selling stock. All of these people in town were kept working during the Depression years on account of him. You'd never know he was the president of that company, because he was involved in everything and with everybody in town. We used to go out and play touch football with him. He always struggled, because he was a big heavy guy, and we were slender and young, and we could run like hell. He couldn't

catch us, but we could catch him. [laughter] There was no city government in Silver Peak and no money, but the people living around there would have these celebrations. If there were foot races, he'd give \$2 or \$5 to whoever won. He was a real good sport, a real good guy.

He worried about his people. Back in those days the minimum wage at the Black Mammoth was five dollars. That was for a day. Overtime didn't mean anything. You might get paid for it; you might not. But if you did, you just got regular pay, sixty-two and a half cents an hour or whatever it was. [laughter] Well, when Cord came there, the first thing he wanted to do was to reduce wages, but it was tied up in a contract where he couldn't do that.

Cord had a real bad reputation back East. He made a lot of money in the steel mills, and he was always afraid somebody was going to kill him. If he'd eat out in a restaurant, he'd always have somebody else taste his food before he'd eat it. He'd have people sitting with him, and he'd draw diagrams and stuff on the tablecloth with ink. We were a poor town, and the restaurant couldn't afford new tablecloths when he drew on them.

Whenever Cord came to town, he came by plane. It was a Lockheed, a big plane, and he'd give Vollmar or somebody like that a ride, but they're about the only ones that ever got a ride. For the people that were close to him (like Vollmar and his general manager, Arthur Sweet), he gave them Cord automobiles for Christmas. That just got Vollmar into trouble, because he'd go down to LA, and he'd speed. The highway patrol couldn't catch him. [laughter] In those days they didn't have radios to call ahead, so the patrolmen had to get to a telephone to call ahead to the next town. By that time Vollmar was already past that town.

E. L. Cord was much more aloof. He didn't spend that much time in Silver Peak. He relied on Sweet and his chief geologist, Prescott, who had a lease. Well, later Cord wound up with the whole darn place, just before everything was shut down because of World War II. Sweet built a house over by Vollmar's, but, of course, he was nothing like Vollmar. He was the general manager, and you knew it. He was civil, but he didn't go out of his way to be friendly like Vollmar.

Vollmar liked to ride horses until the good life got him, and he was too fat. One time in Reno he bought this parade horse, which was big enough to hold him, but that doggone horse was forever dancing and prancing, throwing his head and throwing foam from his mouth into your face! He shook Vollmar to pieces.

Vollmar was a terrible gambler, too. He'd call in his bets on horse races from his phone (in his home) in Silver Peak. He'd bet on anything.

Although everyone liked him, the people in town were real independent. They didn't want him telling them what to do. One time in about 1936 during the governor's election, a friend of his, a Mr. Fulton who was also a Republican, was running for governor. I think Mr. Fulton could have carried Silver Peak in a walk, because everyone really liked his son who worked up at the mill. Well, Fred Vollmar wanted him to be elected, so he had somebody take a bunch of fliers around town, into the bars and everywhere, with ballots on them marked off nice and plain. He was more or less telling everyone they had to vote for Fulton. Besides that, Vollmar was out campaigning for Fulton, but poor old Fulton didn't get hardly any votes. [laughter] You don't tell a miner what to do. That's silly.

# MERLE SWANSON: A PRETTY GOOD GUY

Merle Swanson was a strong, healthy young man with a wife and family who worked his way from the bottom up at the Mary Mine, from mucking to shift boss. His contacts with Fred Vollmar Jr. and E. L. Cord were brief and never below ground.

I knew Fred Vollmar. Well, he was a pretty good guy. I worked for him here at Silver Peak, and I also worked for him up at Gabbs. I hauled ore for him out of those mines and did quite a lot of work for him. I've been to his house where he lived down there in Silver Peak. Pretty nice. I don't know if Hefty Sanderson bought that place or who got it. 59

Fred Vollmar Jr. Fred Vollmar Jr.

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I don't recollect too much about him being underground, or Cord either. He seemed to stay away from underground, but I'd see him on the surface and talk to him about different things when he was with the superintendent.

I knew E. L. Cord, but he stayed pretty well in Fish Lake Valley. He had two boys. About the time the war broke out, he told his boys to get tires for his cars, and then right away tires were rationed, and you couldn't get any tires. But Cord had bought up quite a few tires, and the boys went there and tried to get tires from their



Merle Swanson. (Photograph by Victoria Ford.)

dad, but he said, "I told you, you needed to get those tires before the war, and you didn't do it."

The kid said, "Well, we'll do the best we can." So they went and bought him a new . . . well pretty near a new car. Well, they got the tires, but had to buy a car. [laughter]

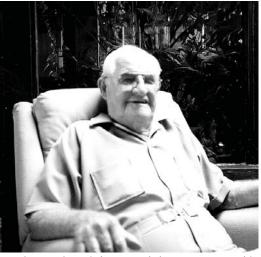


# **ROBERT P. DOUGLASS: PAYCHECKS AND POKER GAMES**

Bob Douglass was born and raised in Tonopah. When he graduated from high school, one of his first jobs was building the Vollmar mill in Silver Peak, Nevada, where he learned about both Vollmar Jr. and E. L. Cord.

Silver Peak is an old camp, and the Mary Mine is an old mine. It was worked years ago when Tonopah, I guess, was discovered. It was abandoned, and I think Vollmar went in and got a lease on it. And then he struck some gold in there, and he was hauling that ore down to that mill down in Silver Peak.

Warner brothers, you know, they'd come out there. That's another story now. Vollmar owned the mine up there. Vollmar was the nephew of Harry Stimler, and Harry Stimler was the smartest . . . was one of the discoverers of Goldfield, but they were Indians. And Harry Stimler stayed down around Hollywood, and he sold stock.



Bob Douglass. (Photograph by Victoria Ford.)

Vollmar hung around Tonopah as a kid, and he worked around Tonopah, and then he went out and got that Mary Mine. He leased that Mary Mine up on top of the hill out there at Silver Peak. And he brought Cord [E. L. Cord] and the Kellogg's (Kellogg used to own Forest Lawn in Los Angeles) and Bugs Warner (Warner used to make all the gears for General Motors). Cord and Kellogg were investors in the mine with Vollmar, and then they

came into Silver Peak, bought those ranches and lived down there. Cord liked it. He's one of the greatest things to happen to Nevada. He was a senator down there from Esmeralda County, and he went up to be a legislator. They put up the money for that mill, but I didn't see them.

Vollmar was around there all the time. He always had a deck of cards when it was payday. [laughter] Oh, I guess there were some guys that got away with it [their paycheck], but a lot of us kids just stayed there. I never had any money because Fritz Vollmar used to pay us off, and then he'd have a poker game. Well, after I worked there for three or four months, I never had enough to get a haircut for God's sake! I never had any money when I came out of there, but I had a lot of fun and a lot of experience.

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## BEN VILJOEN: VOLLMAR FOLKLORE

Stories about Fred Vollmar Jr. have survived and probably grown over the years. One of Silver Peak's resident historians, Ben Viljoen, has collected and shared several of the current legends from the infamous Vollmar years.

I bought Fred Vollmar Jr.'s house. He was a very famous promoter of this area—Silver Peak's answer to Graham Rice and George Wingfield. Maybe not quite as famous, but he was always bringing new money into the area. In fact, the house itself was built by the Warner brothers. He conned them into what a wonderful idea it would be to have a little hideout that they could come to and bring some of their favorite secretaries along. After they lost interest in partying and lost a lot of money in the mining business, they gave up on Silver Peak, sold the house back to him, and went back to Hollywood. 61

Fred Vollmar Jr. Fred Vollmar Jr.

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The house hasn't changed much—still has a little bunkhouse right next to it and a barbecue room with a copper roof on it. All the big gardens and tennis courts are gone. It's got the only private swimming pool in town, which Vollmar would drain whenever he was out of town, because his wife didn't know how to swim. She came in drunk one night and fell in the swimming pool, and it darn near killed her. She broke her back. If there had been water in it, she would have been OK.

There are a lot of stories around today about him. My favorite is that



Ben Viljoen. (Photograph by Victoria Ford.)

when he was on top of the world, he ate steak, his buddies ate steak, and his dogs ate steak. When he was under the world, well, then he and his dogs ate rabbit.

He was one of the first in Nevada to buy an airplane. He'd fly to Long Beach and promote a bunch of stock, and when the people in Silver Peak saw his plane coming back to town, they knew everything was well. They would have plenty of money to operate or to do a bunch of development.

He was half Paiute Indian, which was very common in Silver Peak, because it was such a miserable place to live, so hot in the summers that the men couldn't get white women to live out here, and some married Indian gals. Anyway, he used that to promote stock, and he'd tell these movie stars and hot shots in Hollywood that his ancestors had told him about great gold mines in the wilds out here, and boy, they'd flake out the money!

Fred Vollmar Sr. is called the "Father of Cyanide" in Nevada, because he was one of the pioneers in the cyaniding process. Fred Jr. was no slouch as a mining man. He flat knew his business and his mines after two generations of being involved. But he had that gift of gab to be able to go talk people out of their very last dollar. I understand he had a number of other companies, and he would kind of rob money from one company to finance another—different ways of getting money that's kind of illegal nowadays.<sup>6</sup>

Notes

1. Ford, Bob Douglass oral history, 17.

2. WCRM, 3-33.

3. Shamberger, 76.

4. *The Goldfield News*, 14 May 1937. Leon Hill stated in his oral history that the privately-owned airplane referred to in this newspaper article actually belonged to E. L. Cord, not to Fred Vollmar Jr. Ford, Leon Hill oral history, 103.

5. Ford, Stewart Carnall oral history, 3-10. This is an extended excerpt from Carnall's oral history. On the following pages, all similarly formatted sections should be understood to be segments from oral histories from the Ford volume.

6. "... Vollmar's machination also caught the eye of the Internal Revenue Service (IRS). Apparently, he either chose to ignore his taxes or he was so financially pressed that he could not pay them, and in 1940 the IRS contacted him regarding past due taxes. The final disposition of the tax case is unknown, but this indicates the financial strain under which many of Vollmar's enterprises were by 1940." WCRM, 3-34. However, Ben Viljoen said Vollmar's reputation for honesty was viewed as impecable by those living in Silver Peak, and Leon Hill (101-103) said people liked and trusted Vollmar.

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Fred Vollmar Jr.

# 4 The Mines

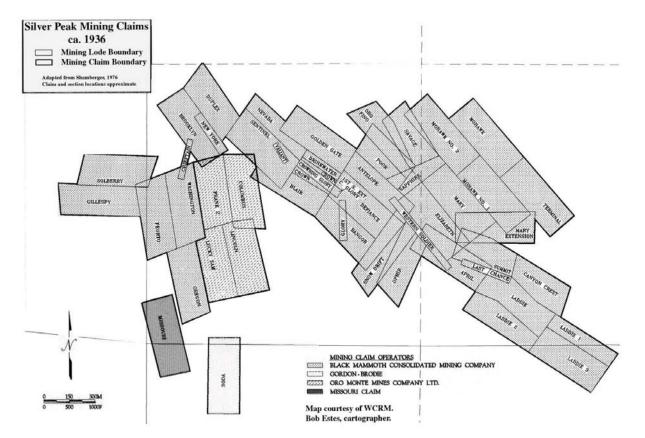
Fritz Vollmar (Fred Vollmar Jr.) returned to Silver Peak and found a town ready for change, ready for another boom. By now, Silver Peak's enterprises were passing into the hands of the next generation. Sons of Fred Vollmar, John Chiatovich, the Shirleys, and the Hills ushered in the new era. The confusing maze of owners from Silver Peak's early days was now reduced to just a few, and most of that was in Fritz Vollmar's hands. A 1936 map of the Mineral Ridge Mining District shows that Vollmar, through his various companies, held leases blanketing nearly all the claims on the hill.

## VALCALDA/OROMONTE

One of Vollmar's acquisitions was the Valcalda Mine. The Valcalda brothers' faith proved well-placed, and their claims continued to yield enough gold to attract interest. In November of 1927 John Valcalda decided not to keep the family mine. He sold four claims to a new group, the Oromonte Mines Company, Ltd., and those eventually went to Vollmar Jr. But first, the Oromonte company made a brief stir in town.<sup>1</sup>

Organized by A. J. Greene, a man from Los Angeles, prudent owners of the Oromonte company sent a sixty-ton shipment of ore to the Mason Valley Smelter near Yerington to be processed before investing in a mill. At \$15 to \$20 a ton for ore taken from the old ore dump, the Valcalda values warranted a mill, although that first load made little if any profit.

The high shipping costs proved a reminder to keep production expenses low. Also convinced he could keep his men working throughout the winter, Greene sought a connection through the Mary Tunnel. He saw that as a sure-fire way to move ore off the 7,280-foot mountain less expensively. Perhaps when asked, the Pittsburg-Silver Peak Company refused the use of the Mary Tunnel, or maybe the Black Mammoth Consolidated Mining Company's lease work was the obstacle that prevented this plan, but he



"The confusing maze of owners from Silver Peak's early days was now reduced to just a few, and most of that was in Fritz Vollmar's hands."



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"[John Valcalda] sold four claims to a new group, the Oromonte Mines Company, Ltd., and these eventually went to Vollmar Jr." (Photograph by Arnold Thallheimer, courtesy of WCRM.)

never connected with the Mary Tunnel. Instead Green developed another system. A surface-rail tramway carried the ore 1,000 feet to a bin which emptied into a huge pipe. The ore slid inside the large pipe down to the lower bin where it was loaded onto trucks for the final journey into Silver Peak.

In addition, Greene announced plans for a one hundred-stamp mill to be located in Silver Peak, but instead of building new, he organized another company (the Calvada Mining and Milling Company) and reopened John Chiatovich's cyanide mill. Revamped to handle seventy-five tons per day instead of the original fifty and to use amalgamation, flotation, and concentration processes, the mill was up and running by July 1928.

Within a year it became apparent that even after renovation the old Chiatovich Mill was outdated. Now named the Calvada Mill, it simply could not retrieve the values needed to make the ore profitable. Greene closed the Chiatovich/Calvada Mill for the last time in August of 1929 and by February completed construction on a brand new mill using all new equipment. This was the new forty-ton Rock and Keeler Mill, operating three shifts a day and recovering \$18 to \$20 per ton of ore. Evidently, it operated sporadically, because five years later *The Goldfield News* (August 16, 1935) reported that the R and K Mill would be "reopened," and Vollmar's Gold Wedge



"[Greene] organized another company (the Calvada Mining and Milling Company) and reopened John Chiatovich's cyanide mill." (Photograph courtesy of Leon Hill.)

Divide Company would reopen the Oromonte Mine. The article also mentioned another important Silver Peak name:

Ed Cleary, well-known Silver Peak mining man, has a small force of miners at work now clearing out the Oro Monte (sic) workings preparatory to resumption of actual mining.

Historian Steve Mehls noted:

Based on information in the file of MRRI... after Vollmar took over operations of the Oromonte, he operated the property as the Gold Wedge Divide Mining Company that kept five men at work as late as 1940 on development and minor (one hundred tons/month) production.<sup>2</sup>

No doubt Vollmar was pleased to add this key property to his operations, since it was centrally located between the rich Mary Mine and the Hanchett and Gordon-Brodie claims.

# GORDON-BRODIE MINE AND MILL

Although Vollmar's interests encompassed nearly every major property in the Mineral Ridge Mining District, a few small operations such as the Gordon-Brodie Mine and Mill continued nearby. It was one of the oldest claims in the district, originally located by the Valcalda brothers and transferred to John L. Swanson in 1896.<sup>3</sup>

	THE VALCALDA MINE	69
Early Entrepre	eneurs	The Mir
1886 1885-1905	Eli Sweiger Valcalda Brothers mined and milled in a two- stamp (or three-stamp) mill.	
The Pittsburg	Era	
1906	Silver Peak Valcalda Gold Mining Company bought Valcalda claims, built fifty-ton amal- gamation & cyanide mill nearby.	
1907/1908 1909	Silver Peak Valcalda Gold Mining Company under new owner Samuel Newhouse held the property briefly, did little work. Pittsburg-Silver Peak Gold Mining Company acquired Valcalda claims and mine, moved stamps to Blair mill and connected the Valcalda property by rail.	
Quiet Times		
1917	Valcalda Brothers repurchased their claims at the sheriff's sale.	
The Vollmar Y	lears	
1927	Oromonte Mines Company, Ltd. bought from Valcalda brothers.	
1932	Gordon-Brodie purchased one of the Valcalda's properties from John L. Swanson. <sup>4</sup>	
1935	Oromonte leased to Gold Wedge Divide Min- ing Company, a Fred Vollmar venture, which optioned the Valcalda and Mary Mines to E. L. Cord. From there they were integrated into the Black Mammoth Consolidated Mining Com- pany operation.	
1942	Closed due to War Board Order L-208.	

In 1932 W. E. Brodie and Ray H. Gordon bought out Swanson and worked to develop the claim before selling it four years later to the International Smelting Company, a subsidiary of Anaconda Copper out of Salt Lake City. According to Brodie's son Jack, International Smelting worked all the rich ore bodies without developing new ones, and it wasn't long before his father had to pick up the pieces.

Water was scarce at the 7,000-foot elevation, and in 1933 Gordon filed a claim to use water from the Valcalda Springs in Fish Lake Valley. Earlier, a two-inch diameter pipeline had been built to carry the water several miles across to Coyote Pass. The water line was partially buried underground, and Jack Brodie vividly remembered helping his father dig it up and thaw frozen sections during the cold winter months. A redwood tank stored water near the spring, and after it was piped to the mines, it was stored in a 27,000gallon tank.

Brodie told the story of his father finding a rich ore body located deep underground sometime between 1932 and 1940. A "Colorado style" headframe, which was unusual in Nevada, was built to pull the ore up the shaft and out of the mine. A diesel-powered generator was installed in 1936 one of the earliest internal combustion engines used to power mine equipment, although Black Mammoth also had gasoline engines to power air compressors for drills.

Workers at the Gordon-Brodie Mine lived a short distance away and near their work, as did those at the Mary Mine. Several small bunkhouses and homes were located near the mine entrance. Archaeologists recently discovered a dugout used as a root cellar or storage shed. In studying other



"A 'Colorado style' headframe, which was unusual in Nevada, was built to pull the ore up the shaft and out of the mine." (Photograph by Lila Lindsay, used courtesy of WCRM.)

The Mines

artifacts they discovered traces of imported fruits similar to those at the Mary Mine, as well as pieces of a woman's dress. It would be interesting to know if it belonged to Jack Brodie's mother, because he reported that she helped his father at the mine.

A fire burned the mill down in 1940 and forced the closure of the Gordon-Brodie operation. Jack Brodie inherited and maintained the property for years until vandals "tore things up pretty bad."



# JACK BRODIE: MY FATHER'S MINE AND MILL

While Vollmar promoted Silver Peak's Black Mammoth mine and mill, others made and lost fortunes nearby. One well-known operation was the Gordon-Brodie Mine owned by W.E. Brodie and his partner Ray H. Gordon. Brodie's son Jack described the development, sale, repossession, and the fire that finally destroyed the mill and took the heart out of his father. As a teenager, Jack worked at the mine operating the hoist of the Colorado-style headframe, which remained on location for nearly sixty years. Jack also remembered his family's financial roller-coaster ride from the fluctuations of the mining industry.

#### W. E. Brodie, Miner

My father (W. E. Brodie) was from Denver, Colorado, and as a seventeen-year-old boy he ran away from home and ended up working in the mines in Pioche. After he was married (to Eda Walker) we lived in Tonopah.

This was during the Depression, and my father was the underground foreman for the Tonopah Extension Mining Company. They had a huge mill, and they had a huge mining property. We lived in a company house at the Victor Shaft, and we were the watchmen there. We got the house and ten dollars a month to live in it as watchmen of the property. They had to have the watchman for fire insurance.

We had a Model T car that my father would jack up rather than crank. He would jack up the back wheel, put it in gear, and turn the wheel to start the car, and then he would drive over to



Ronald "Jack" Brodie, 1967. (Photograph courtesy of Ruby Brodie.)

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the mill. It was probably two miles away from the mine, from the shaft, and he would walk a route there at night and punch his clock. (This was before he went into Silver Peak.) There were stations all over the property that had a little metal box which had a key in it. This clock that he carried had a paper disk in it. He would go to each station, and he'd put that key in the clock and turn it, and that would punch the paper disk showing that he was at that station at that time. Then, when he went prospecting, they still paid us to live there rent free; he didn't have to walk the property anymore.

## **Discovery and Partnership**

The Victor Mine in Tonopah closed in 1929, and my dad went prospecting for gold. Silver had gone to near nothing (I think silver went to twentynine cents), so gold was the precious metal that everyone was looking for, and he found a few claims, but they weren't very good.

When he was prospecting he found the mine at Silver Peak. There weren't accommodations to begin with. They built cabins up there, and they bought cabins in Tonopah, dismantled them, and then hauled them up there and reassembled them up there. There were three of us kids, and we were in school in Tonopah where we continued to live. My mother and father sometimes would be up at the mine for a week at a time, or my father would be up there. He'd have to come to town every week for supplies and things anyway. We were left alone sometimes to get ourselves to school and so on.

The mine was in Esmeralda County, and Goldfield was the county seat. We were in Nye County, and it was kind of odd because my father did have to go to Goldfield quite a bit for legal mining claim deals and taxes. But Silver Peak was a very, very small town when my father first went up there.

The claim he found out at Silver Peak was up in the Red Mountain mining district. It was owned by [John L.] Swanson, and he wanted to sell this claim that he had. It was just a little hole in the ground, but you could see gold in the quartz in the bottom of the claim. My father didn't have any money. The banks had closed, and we lost any money that we did have. My father didn't have any wages coming in or anything.

There were some investors around—even as far away as New York and Los Angeles, they were looking for gold properties to invest some of their money in. Somehow or another my father met up with a man by the name of Ray Gordon, a newlywed. He had met his wife on a trip around the world, and they got married. Her name was Curtis, and her folks had quite a bit of money, and they were looking to invest some money in gold property, maybe as a wedding present to the newlyweds. So they got together with my father, and together they made a deal with this Swanson that owned this little mining claim.

I think possibly Ray Gordon may have come to Tonopah. Most of the mining deals were all conducted in the bars. There was a Tonopah Club, and the Mizpah Hotel was a stock exchange in the early days. The Mizpah Ho-

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The Gordon-Brodie Mine Camp, 1939. (Photograph courtesy of the Central Nevada Historical Society.)

tel... when you walked in the lobby, it looked like a bank, because it had all these windows, and it had a big blackboard on the wall with stock figures listed on it every day. They could have met in the Mizpah Hotel, or he may have come up to Silver Peak just prospecting.

My father probably didn't want to pay more than a thousand dollars for the claim. That was a lot of money. The only way he [Swanson] would sell it was for cash. They tried to talk him out of taking cash for it, to take part in cash and then hold an interest in the claim and share in the profits. But he would have no part of that. He wanted all cash, so they paid him full cash for this mining claim. And he put all that money in the bank, and then the bank closed, and he lost all his money. He had another little piece of property, next to the property my dad had, that had a little spring on it, and he lived there until he died. My father really took care of him and helped him out with groceries.

In the wintertime they were snowed in completely while working the claim. That was the main claim, and then they staked out other claims around there. One of the claims that I remember was the Valcalda claims, and that was adjoining my father's property. And then, of course, the Mary Mine— E. L. Cord bought that, and that was the Cord property during my dad's time. They had adjoining claims. My father ended up owning fifty-four claims up there. They all had small values, but at this time gold was only thirty-five dollars an ounce, so you had to have pretty good ore. It was all underground, and it was in a hard quartz—couldn't be mined similar to the way they do today in big masses of gravel.

#### Developing the Mine

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My father developed the mine. The first shipment that they made out of the mine was shipped in burlap bags that were paper lined and came from California. They were fertilizer bags, and they sacked all of this ore up in these bags and sent it to the smelter in Utah. They bagged it because it was so valuable—it was such high grade, all really high grade. An armed guard arrived in an ore car from Blair Junction. They trucked it to Blair Junction and then put it in a car of the Tonopah and Goldfield Railroad, which came through there then. That was quite a big, big thing—this first shipment. As I remember it, every piece of ore, every rock that you picked up, you could see gold in it somewhere, whether it was a stream or maybe it had what we call bug holes in the quartz. Bug holes in quartz had little pieces of gold hanging in there. It was really neat. I was only about ten maybe, and this was in the early 1930s. At thirty-five dollars an ounce, it was a good shipment. Anyway, they took the money from that, and then he had subsequent shipments. That was the only one that they bagged. The rest of it went just in truck loads.

When they first developed the mines it was high grade, and then it wasn't quite as high grade as they went on into the mine where they had an incline shaft. The first deal on the mine was probably only ten-feet deep. It wasn't very deep at all. At the bottom of the mine was this high-grade gold. As they mined it and followed the veins down there on the fifty-foot level, they started to run drifts and tunnels. The high grade was about a hundred yards—about the length of a football field from the shaft of the gold mine.

Where the original person that prospected that area found a little vein was kind of a rolling hill, and he went sixty, seventy-five feet into the side of the hill following this little vein of quartz. It had some value but not enough value to really mine it, so then he quit and just left that tunnel in there. Then they drove a shaft up to the top of the hill, and it was ventilated through there. My father put a door on the front of that tunnel, and we used it as a cellar. It stayed a constant temperature in there—forty degrees when it was maybe eighty outside, and it still was forty degrees when it was maybe ten below in the wintertime. We used to hang hams and bacon and even fresh meat and things in this cellar, because we didn't have refrigeration. We stored all of the food in the cellar. They built shelves in there on the walls, and then the meat we had hanging from hooks.

## Cellar Was Rich with Gold

One thing that was real ironic was about that tunnel we used as a cellar. The original shaft was an incline shaft that went down to the fifty-foot level. They used to bring the ore up out of the incline and put it in a dump truck and then drive the dump truck over to a big ore bin that was at the mill. But when the International Smelting Company took it over, they ran a drift (a tunnel) from the fifty-foot level over about where we were running the truck, and then they sank a vertical shaft. They would bring the ore to the vertical shaft and hoist it up to the surface; and then they ran just a track from the hill to the mill. The mill was built on the side of a hill. To the high part of the mill was the ore bin, and they just trammed an ore car over to the bin and dumped it in a bin right at the mill (where the headframe is now). That's the vertical shaft.

Now, not too far from that . . . it would be on the north side, is where the incline shaft was [originally]. Most of the working was on the fifty-foot level, and they had stopes and drifts and things into the fifty-foot; it was the main level to the shaft. Then I think they sank the shaft maybe seventyfive, a hundred feet, and then abandoned it. I think they diamond drilled a lot of that area before they turned it back to my father, and so they came to the conclusion there was no more high grade there. My father always thought there was, and he was going to find it again like he did before—that's typical of a miner.

Well, they drove a drift back underneath the tunnel, and one of the richest bodies of ore in the mine broke into the tunnel. The original miner that mined there probably wasn't three feet from the biggest ore body in the whole mine. It ended up a great big huge stope that broke into the original tunnel.

# The Mill

I don't know whether the money all came from the mine or whether more money came from the investors, but they built a little twenty-five-ton mill. In the meantime they bought another property that was out of



"They built a little twenty-five-ton mill." The Gordon-Brodie Mill in 1939. (Photograph courtesy of the Central Nevada Historical Society.)

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Manhattan, and it was called the Van S Quicksilver Mine, a mine that in the early days had quite a bit of quicksilver and then had shut down. But it had a retort, and it had a diesel power plant on it. They took that diesel power plant and moved it to Silver Peak, and that powered the little twentyfive-ton mill. It was a two-cylinder diesel and, when it was working right, it'd blow smoke rings. It'd go, "chirk, chirk, chirk," and you'd hear it all day long. At the Quicksilver mine, they had leasers in there, and they got quicksilver out. Then they would buy the quicksilver and use it at the gold mine to use in the mill.

The mill was amalgamation and flotation. They used chemicals, but no cyanide. I'm sure it wasn't cyanide. And one of the chemicals that they used there was pine oil. I'll never forget that, because of the pine smell in the mill. When you went in the mill, it just had an enticing, pleasant smell, and that was from the flotation machine. It looked just like root beer floats. There's a kind of brown foam that came over the top, and that would carry the fine gold in a concentrate. And then what was left in the bottom was the tailings. You couldn't do it today, but in that day the tailings just went down the wash.

## Sold

Through the years my dad was kind of developing the property to sell, and he would follow an ore body until it was pretty rich or until it was good, real good, and then he would leave that and follow another ore vein and another drift or stope. At one time everywhere you went in that mine there was high-grade ore: by high grade, say maybe thirty-five-dollar ore that was carrying one ounce to a ton. That was considered high grade.

My grandfather from Pioche was a mining engineer, and he came and helped my father. His name is Frank Walker. He did a lot of work on the mine. He drew underground maps of the workings of the mine, and resurveyed out all of the property lines and recorded all of that and worked with my father for several years before he sold.

International Smelting and Refining Company became very interested in the Gordon-Brodie property, and they purchased it from my father and from Gordon. My father wasn't going to make the mistake that Swanson did, so he didn't take all the money. He took it in payments. What they did is, they just followed every vein that my dad had until it petered out, and when there wasn't any more, they went to the next one. They didn't develop as they went along, and then all of a sudden, they didn't have any really good ore in sight anymore. They quit making their payments, and my father and Gordon repossessed the property after eighteen months.

As a matter of fact, my father sold that mine for \$250,000 dollars—a quarter of a million dollars. And we thought that was just . . . and it was. That had to be probably 1935 or 1936, somewhere around in there, and that would have been probably five million today at least. Gold was thirty-five

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dollars an ounce. My dad always said, "Gold is going to go to seventy dollars. And when it goes to seventy dollars, we'll have it made." But he never lived to see it. He probably wouldn't have believed how high it went. Well, it went over \$650, pretty near \$700 at its peak, I think.

#### Repossessed—Bad Mining Practices

When my father repossessed the mine, we moved back to Tonopah, and my father started to mine again and tried to develop the mine. He used to say that all they did was go in and take the high grade out, and they didn't develop as they went. And he said in order to keep the mine operating, as you're taking out high grade, you have to develop the low grade and get it to go into the high grade, if you can, or follow the veins and the quartz and the formations to open them up into a higher-grade ore. He definitely said that what they had done was all very poor mining.

When he returned, I think they could mill ore as low as eight dollars a ton and break even. If it was over that they could make money. During the eighteen months away, he had reinvested all the payments in other prospector deals, so he really came back to the mine broke. Gordon and Curtis didn't feel like putting a lot more money into it. So if we didn't get some money out of the mine, why, we didn't put anything into it. It was a struggle to do the assessment work, and then he had fifty-four claims; and I think five of the main claims were patented, so they paid taxes on those. All of the work they did on them counted as assessment work for all fifty-four adjoining claims. When my dad took it over again, sometimes we wouldn't run the mill for a whole week while we were mining ore and building up our stock, and then maybe they'd run the mill ten, twelve hours a day.

#### Hanchett Feud

The Valcalda property bordered the Gordon-Brodie property on one area. The Cord property bordered it on another area. Then there was, I think, two claims or five claims right in the middle of my father's that my father didn't own. It was owned by a man by the name of Hanchett, Hanchett properties. There was kind of a feud there between my father and Hanchett. As a matter of fact, Hanchett brought an apex lawsuit against my father claiming that he was higher, and the ore that my father had taken out was on his deal.

I've forgotten how an apex is, but if it goes through the end line, it's yours; or if it goes through a side line, it's yours; or something. Anyway, my father won the apex suit. I imagine there's probably some records of that in the Goldfield courthouse. So there was some feuding going on between them. I think my father took a couple of shots at somebody. As I remember, someone went to one of the stakes that bordered the claim. My father had the rifle by the kitchen door of the bunkhouse, and he took a couple of shots at 77

somebody up there, and they left. As far as I know, I don't think any charges were ever made on anybody.

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# Water Supply

But as my father was trying to bring the mine back a little bit, there were three or four springs that were five miles away from the camp that my father had developed. They had a pump house, and the springs all came to one big, wooden water tank at the pump house. The pump house had a diesel engine on it that pumped water to the very top of the hill, where they had another big, wooden tank, and then a gravity flow from there for five miles into the camp. Every winter the pipeline would freeze up. I spent some of my winters up there as a kid freezing to death, digging up the pipeline where they went down into a low area. We'd build fires on it and get it all thawed out, and we'd do that all the way to camp until we got water running in the camp again.

But not far from that mine (it would be around the southeast of the hill) was where the little spring was that Swanson had. Well, I think really it was a cave with a wooden front on it that he lived in for a house. And he had a stove in there. A stovepipe came out the wooden front. But we never used water from his spring. We used water from Coyote Springs. Chiatoviches were ranchers, and they had water rights in there, so we couldn't shut off all the water. We had to maintain this big water tank, and then they had to maintain a pond at the base of the water tank for the livestock that were in the area. There were three springs in that area, and they built a little cabin over there, and they hired a pump man that would run the pump every day, and they would run the water up to the top of the hill. Of course, that was when the mill was running twenty-four hours a day.

If you're up at the headframe and you were looking kind of northwest, down a little valley, there's a hill up there. There was a road up there, and I imagine it's still there. The Hanchett property was on the left of that road on the hill. Northwest [from the headframe] was where Hanchett was, and then all of the property to the left of that was my father's. [Nevada Attorney General, 1998] Frankie Sue Del Papa's grandfather had some claims in there. They never did operate them that I knew of, not at the time that my father operated his anyway. There was a two-stamp mill in there on the Del Papa property. It was just the stamps. There was no building over it or anything. It was pretty dilapidated. Whoever had that originally, just abandoned it. The Del Papas . . . Frank and Fred were the two boys, and Egilio, I think, was the father: he was Frankie Sue Del Papa's grandfather. He had a little store and a bar in Tonopah, and the store was all Italian goods. I remember most of the miners that worked for my father were Italian, and that's why I love to eat pasta. Lots of pasta.

#### Hardship Caused by Fire

I can't remember just what year it was, but the mill caught on fire while my dad was in town. When he got back up there the mill had burned to the ground. I was in Tonopah at the time. Some of the miners and personnel were there. I think that someone had turned the water off, and the pipeline was frozen, so there was no water to put the big fire out. It was almost the end of my father. It . . . the trauma he went through and everything was just really bad at the time. Even as a kid I remember it, very much. It hit me really hard, also. I kind of liked the mine, until we went back the second time after my father had sold it: then I didn't like the mine so much. I thought it was too hard a life. I wanted something better to do.

When the mill had burned down and money was real tight, my father continued to mine some, and I went to work. I had several jobs. I worked for a dairy, the Safeway grocery store, and a service station. Then I had a parttime job at a roller-skating rink. I've always had a two-job system, but it took two jobs. It really did. My last years in high school, I hardly was ever home. I worked at Safeway until six o'clock, and then walked across the street to a service station and worked there until ten o'clock, and then I closed the service station, slept there all night and answered night calls, and opened it at six in the morning until the owner came at eight, and then I went to school. Then when school was out, I went to work at Safeway until six again. On Saturday, my job at Safeway was until eight o'clock at night, and then I worked in the service station until ten, closed it, slept there, answered night



The remains of the headframe at the Gordon-Brodie Mine, 1996. (Photograph by Arnold Thallheimer, used courtesy of WCRM.)

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calls, and then I would open the station at six o'clock on Sunday morning. The Safeway store was closed on Sunday, so sometime during Sunday the person who owned the service station would come down and relieve me, and I would go home and get clean clothes and maybe eat a meal with my family and then go back at maybe six o'clock and close the service station at night at ten—at thirty-five cents an hour. When I worked at the service station, I got an hour's time for every call that I would get up and answer at night.

This was in the Depression era. Nobody had any money, and the service station owner didn't have any money either. I never drew a paycheck from the service station all the time I worked there. (I did draw a paycheck from Safeway, which helped my family.) Finally, he [the gas station owner] went bankrupt, and the Cavanaugh brothers bought him out, or took over the bankruptcy deal, and the wages had to be paid. For the money they owed me, I got a little 1939 Plymouth convertible. It had belonged to Lois Kellogg, of the Kellogg cornflakes family. They had a ranch in Fish Lake Valley. When she had turned that car in, it was worth six hundred dollars. That's what the car sold for. They owed me maybe up to two hundred dollars, which I used for the down payment, and then I made payments on the car after I got out of high school.

My father and Gordon owned that mine up until the time that my father died in 1960. I think they may have been behind on taxes. They did have some leasers in there, and they had some junk people that went in there and moved a lot of the metal that was in the fire at the mill and the huge ball mill.

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## THE MARY MINE

Whereas early miners were able to locate gold at Mineral Ridge by digging only ten or twelve feet down, by now the rich ore was further underground and demanded more advanced mining and hauling methods. The Mary Mine became the foundation of Vollmar Jr.'s operations and the epitome of mining technology for the 1930s.<sup>5</sup> Under Vollmar's supervision an entire building complex flourished around the Mary Mine, including an office building, change room and carbide storage, battery charging station, blacksmith and machine shops, warehouse, and assay office. A transformer station was added about 1907 when electricity replaced gasoline engines and gave miners use of compressed-air drills and electric hoists at the winzes. Trucks hauled the ore replacing humans, animals, and aerial trams.<sup>6</sup>

Many miners lived in a bunkhouse and ate their meals at the nearby boardinghouse. Archaeologists recently uncovered ornate bed frames, apparently used in the bunkhouse. They also found traces of the type of large food containers that would have fed many hungry miners—large crocks,

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"Under Vollmar's supervision an entire building complex flourished around the Mary Mine." Silver Peak c. 1914-1915. Numbered locations are as follows: 1, Office; 2, One-room hospital; 3, Boardinghouse; 4, Bunkhouse; 5, Mill that was built after Blair closed down by someone who leased the mine. The crater is visible in the back-ground (left), as is the salt marsh (right). The town of Blair is over the hill from the water tanks marked "xx". (Photograph courtesy of the Nevada Historical Society.)

THE MARY MINE Early Entrepreneurs		
1903 - 1906	Mohawk-Alpine Mining Company	
The Pittsburg	Era Pittsburg Silver Peak Gold Mining Company	
1900	Lucky Boy Divide Mining Company	
1929	Black Mammoth Consolidated Mining Company	
1935	E. L. Cord through the Prescott Lease	
1942	Closed	

three-pound coffee tins, five-pound ham tins, and five-pound shortening cans, along with white hotelware platters, dishes, and cups. They also discovered loin and rib bones—what were normally considered upper-class cuts of meat. These may have been supplied by ranchers from Fish Lake Valley who brought in beef, pork, produce, and water.

Leon Hill described the unsanitary conditions for processing this food and water. A rancher named Mr. Ely simply pumped water from a creek without any filtration or purifying system, placed it in containers, and sold it. When he butchered meat, swarms of flies were attracted and landed in the milk sold to Silver Peak residents and Mary Mine workers.

Local gardens supplied some produce, such as tomatoes, radishes, and carrots, but Hill said many small mine operators came to Silver Peak from southern California and probably brought produce with them. His father brought figs from Los Angeles, and since blackberries did not grow wild around Silver Peak, they may also have been brought from California. Obviously, a steady supply of goods from both local sources and regional supply centers in southern California kept the miners in fresh fruit and produce, meat, water, medicine, alcohol, and tobacco. Some of the men who lived and worked there remembered "Ma Brown," probably Alta Brown, who ran the boardinghouse for Black Mammoth. By 1938, however, Ma Brown was replaced by the Anderson Boarding and Supply Company of Los Angeles, the company that also supplied huge projects like the Boulder/Hoover Dam



"A steady supply of goods from both local sources and regional supply centers in southern California kept the miners in fresh fruit and produce, meat, water, medicine, alcohol, and tobacco." The Mary Mine commissary, c. 1939. (Photograph courtesy of the Central Nevada Historical Society.)

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and the Basic Magnesium Plant at Henderson, Nevada, during World War II. Supplies arrived weekly from Los Angeles, and:

No longer would the boardinghouse be an independent entity. Rather, it was part of an industrial scale enterprise that supplied subsistence items to locales throughout southern Nevada and California.<sup>7</sup>

Life at the Mary Mine became quite lively during the Vollmar years and was a vast improvement over earlier mining camps. In addition to a bunkhouse and boardinghouse, there were five family dwellings. One of those may have belonged to a mine manager, and traces of a Scandinavian newspaper indicate occupants who came from northern Europe. Although some miners still converted tunnels into homes, tents on platforms served as housing for most, and at least one "shot-gun style wood frame structure with a root cellar" showed that more modern housing was available to a few workers.

Around the boardinghouse archaeologists found plain, white, workingclass ceramics. One maker's mark showed the china came from the Homer Laughlin China Company, a Liverpool, Ohio, manufacturer of popular hotel china which was affordable and found throughout the West. Glassware came in a wide variety of colors and uses, from medicinal to recreational. One bore the stamp of the Adolphus Busch Glass Manufacturing Company and dated back to the Pittsburg Era. Most of the food cans were the type of sanitary cans that were mass-produced at a rate of 25,000 per ten-hour day after 1904. These included vent-hole milk cans; upright-pocket, hinged-lid tin cans and flat-pocket tobacco cans; and the old key-wind top or side-strip cans.

According to maps, services for health and safety were available right at the mine. A small hospital and a jail, along with a water pipeline and storage tank, were all there. Some residents drank the water piped from Silver Peak, even though tests showed it was high in arsenic and other minerals.<sup>8</sup> Leon Hill said drinking water was also hauled to the mine in tanks, barrels, and five-gallon containers during the 1920s and 1930s. Either way, water was available, but indoor plumbing was not, and privies were still used.

The Vollmar era brought the glory days, and throughout the 1930s, the sounds of prosperity filled Silver Peak and the surrounding mountains. Men drilled, blasted, and mucked the ore, loaded it onto ore cars for transport from underground mines, and drove the trucks full of ore to the mills. Each job in the mines was a man's job. Each required different skills and plenty of hard, physical labor. In oral history interviews, those few men who knew from memory the heart of the Mary Mine gave vivid descriptions of their jobs; the technology available and how it was adapted to fit; the working conditions, the accidents, and limited safety measures; and who made the day-to-day decisions that kept it all in motion. 83

## MERLE SWANSON: UNDERGROUND AT THE MARY MINE

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The Mines Merle Swanson was born with mining in his blood. From childhood he has carried a passion for mining that he cannot explain. When Swanson and his wife, Margaret, arrived in Silver Peak, the town was still a bit rough around the edges, but they grew with the town as it changed into a safe place for families. His oral history is of particular interest, not only for its glimpse into the past when miners learned their trade solely by experience, but for his descriptions of the methods of underground, hard-rock mining used in the Mary Mine.<sup>9</sup>

## Childhood and Background

Oh, I started mining, looking for rocks, when I was three years old up in the state of Montana. I was born in the state of Montana at Bozeman, and my folks had a place out in the hills. I was out looking for rocks, me and my little dog. I'd get tired of walking, and I'd lay down and take a nap. My little dog would stay with me. He was a little fox terrier. When my folks would start looking for me, they would start a hollering. That little dog would go down and get them and bring them up there where I was. And then I'd get a whipping, and they'd say, "Now you cannot do that any longer. You cannot do that anymore. Something will get you."

Well, as soon as they'd turn their back, I'd do it again. I've been that way all my life. I just can't help it. I'm just that way, and I don't have one mine, I've got over twenty mines. It's hard to believe that I still work twenty mines.

My mom died when I was ten. My dad deserted me, and some people up in Idaho raised me, and I used to go out in the hills herding sheep when I was eleven, twelve years old. I was all over the darn hills picking up these rocks. I wished I knew then what I know now. I bet I'd find a lot of ore up there.

Well, I figured I was an old man when I was sixteen years old, and I met this girl, Margaret, who was fourteen. It wasn't long, we was engaged; and it wasn't long, we was married. Her aunt and uncle took off. While they were gone for a couple of weeks, we got married, and then that woman was so mad at me when she came back. Margaret and I were married for fifty-six years before she died. She liked mining, too. She worked underground with me, helped me get powder and stuff, you know.

#### Work at the Mary Mine

When I came up here to go to work at the Mary Mine, there was thirteen of us come up here looking for a job. Everybody said I'd have to wait two weeks to get a job, but the super knew a guy by the name of Schillings that I had worked for at the Getchell Mine near Winnemucca so he hired me right away. I started out mucking, and I was able to do what they asked me to do, and wasn't long they put me timbering, and from there I went to shift boss and right on up the line. The most men I ever had working for me is somewhere around thirty-five to forty. That counted my blacksmith. Where I started to work was in this tunnel here [indicating Mary Mine portal], but I have worked on all of the other levels up above, off and on. When they put me over the crew of men then, of course, I had all the levels to take care of. I just loved that kind of work, and the better mill grades we could get, the better I felt.

We drove up every day from Silver Peak. Seems like there was a flat spot down in there where you could park the cars. The first thing we did each day was change clothes in the change room, and then we'd fill these lights in our building where we had a carbide room. Then we'd walk back in there to wherever we were going to work. We had a certain place and a certain number that we had to go by. It's on the maps, too, where we were working . . . . We knew what we had to do, of course.

I was on day shift and this other guy, the shift boss, was on night shift. When I was to come back on to night shift, he was telling the super that this wasn't done and that wasn't done, because his men was pretty good drinkers, and they didn't like to do too much work. So I said to the super, "Don't believe me and don't believe him. You come around towards the end of the shift and see for yourself whether it's been done or not."

So he did. When it was time for us to change over, he said (I think his name was Kerner), "Kerner, you're done. If your men want to come out and work for Merle, that's fine, but you're done. I've been going around with Swanson towards the end of the shift, and I know what was done, and what you said is lies. It's not true, and, therefore, you're out." [laughter]



Inside the Mary Mine portal. (Photograph by Arnold Thallheimer, used courtesy of WCRM.)

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When I was here we just had the one main road that went up to the other levels. Most of our ore was dropped down through the raises, and we picked it up and brought it out here with the train that had twelve cars and was run by a battery motor. The train would bring all the ore cars out of that tunnel, and then dumped them into an ore bin over there. I didn't want them to run the motor on out there when I had a train of waste to dump, because we almost lost a motor. But this secretary we had, her husband would . . . bring out the waste, and he'd run the motor right on out instead of switching it down there: we had a nice place to switch them. And I told him I never wanted him to do that anymore. Well, the first thing he did was come out with the motor, and he did the same thing again. So I went in and asked, "Do I have the right to fire and hire here?"

And they said, "Yes, why Merle?"

I said, "I'm going to fire a bunch of men today." And he was first. I handed that in to the secretary, and she said, "No way are you going to fire my husband. He was here a long time ago."

I said, "Well, he goes or I go," and by darn he went, and others, too. Some of them I put back to work, and some I never did. We almost lost the motor a couple of times, and I didn't want that. That motor cost thousands of dollars to replace. But anyway, he wouldn't listen to me.

#### Ventilation and Miner's Consumption

I'm pretty sure this is one of the hats I wore in the Mary Mine. This is a carbide light, and this is good for about two and a half to three hours after filling it. Then the light will go low, and you have to fill it with carbide. You carry your carbide in your pocket, and then you have a water jug in the mine to use in filling the lamp up with water, and then it's good for another two or three hours. But if you get in where it's gassy, and this light starts going out, you better get out of there, because the air is not good for you—to breathe this gas. There was good ventilation in the Mary Mine, because there's openings that go right on up to the other levels. It's just like being in a house with both doors open.

At the mine we had the water piped in. We drilled off that. In some places we had what we call pressure tides to fill these tides up with water. You have to maybe carry it in to fill it in these tides. Then you use so much water when you're drilling, that way you don't get any of that dust.

When I went to work at these mines, I heard that this miner's consumption, this dust and stuff, would kill you, so I went and talked to a doctor. He said, "Merle, miners make good money. What they do is they don't take care of themselves. They drink and they smoke, and neither one of them's any good for you, and this is what really causes it to come on."

So, I listened to what he said, and I didn't do that. I got rid of that, and here I am, I'm going to be eighty-four pretty quick, and I still can go in there

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and drill a round and muck out. I know a lot of people, even nowhere near as close in age as I am, who are not able to do that, so I feel the mining never did hurt me.

#### A Miner's Work

The miner has to put in what they call a round of dynamite. He has to drill so many holes. Well, like he's running that tunnel in there; he's got to drill so many holes and blast out. Now they have mucking machines, but in those days we had slick sheets. We'd put a little dirt on there so that the concussion from the blast wouldn't blow the sheet up, and then it would all be on there, and it was easy to muck it off to their car. That's what a mucker has to do—shovel it, clean that up. That way the miner could go ahead and put the machine on there, and they could drill all of these holes except the two on the bottom, maybe the two relievers, and then he'd shoot it. But during the day, you see, that mucker could be getting this out of the way. Right after that you'd have it all cleaned up, and then they could drill. Well, they usually put about five holes in the bottom, because that's the receivers, and then there's the three lifters. Then after that was all done, you would fire the dynamite.

Well, that was for your drift work. But now your raise is where you'll go up, or a winze is where you'd go down, or a shaft is where you go straight down. But we never had shafts here. We had some winzes but no shafts drilled vertically down. We had a lot of raises, a lot of drift work. On your back above your ore is what they call a hanging wall. Now in a coal mine they call it the roof, and a hard-rock miner calls it the hanging wall.

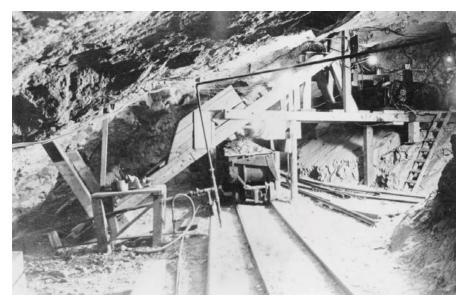
#### Mining Methods

We used all different kinds [of mining methods]; we drove drifts; we had our stopes; we had raises; we had winzes going. A drift is where you're running pretty level. They usually run your drift just a little bit uphill, so that way you don't have to push a loaded car uphill when you're coming out. A winze is where you're going down on an angle, and a shaft is where you go straight down. I liked underground mining, because your values are much, much better than what you'd get on your surface with open-pit mining.

You have to use different methods about mucking for each. We didn't have any in here, but one place where I worked in the shaft, we had to muck that all by hand into a bucket, and then they hoisted the bucket up and then dumped it. You'd have to do that pretty well with the winze, too. But the winze buckets, it's got a deal on it where they slide up on the timber. Then, when it gets up to where the ore bin is, it automatically dumps itself right in there, and then you let the cable loose, and it goes back down the hole for another trip. 87

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Inside the Mary Mine, c. 1938. (Photograph courtesy of the Central Nevada Historical Society.)

Shrinkage is where you've got an ore body that's laying pretty well vertical. It can be on sixty degrees, but it's got to be so that the ore will run by itself. And all you do is run a tunnel underneath there, and you build your ore chutes there. You don't have to muck on any of that; it all comes down in the chute. You run what you call a raise up . . . loads right into the stope, and every time you blast, you have to raise that a little bit more, so you have a way of getting it out of there. It's the cheapest way there is to mine, because you don't have to muck any of it.

But if you break a hundred tons a day, you can't take that hundred ton out. You only can take out maybe twenty or thirty ton out of that place, or maybe a little more, till you just pull that ore down there, so that you have a place about six feet between the ore and the hanging wall to work. It isn't really a hanging wall; it's the ore body. That's the cheapest way there is to mine where you have veins to work on.

What they call cut-and-fill .... You take the ore out, and then you have a hole in the side of the hill, and you have to get waste to fill this place up. Then you raise your raise and timber, and then you can blast again on top of this waste. That's not good, because you're always losing some ore where there's waste. Then when you get the ore out, you have to go get some more waste to fill in—that's what they call cut-and-fill.

Mining on a stope where the stuff is not steep enough to run, you have to muck it. But nowadays they have these slushers in there, so they just pull it over to the chute, and that's pretty cheap to mine like that. I've done mining here with a slusher. That's all we had, a lot of slushers in here. We had mucking machines in here. Well, we did some hand mucking, but some of the places we was in had the mucking machines, and mucking machines were run by air.

#### Blasting

Now back above your ore is what we call the hanging wall. On the rule, those hanging walls are fixed up like a cement. It's got a pretty slick gangue, and it's easy to pull the ore away from the hanging wall. In blasting it, you don't want to use too much powder, but you want to use enough powder that you'd be able to move it out without too much concussion. You put, oh, we'll say a box of powder into one round. Fill it full of powder, and then shoot it all at one time. It could raise heck with all the rest of the mine, too, because that concussion would blast a lot of things out. I've seen it in different mines where they would even break timber with that concussion. You know, you can talk to a person and know whether he's a miner or not by about how much powder he says to use.

You don't shoot them all at one time. You shoot what you call the cuts. Now, your cuts are where you drill your holes down, and then you have the relievers that come up underneath. Or you could put a burn cut in, where you drill all these holes together (five), and you shoot the middle hole first, then these other holes will go where this one went off, and that's what they call a burn cut. We used that too.

The sound you get is your "boof! boof! boof!" It doesn't bother you any. It makes some smoke, but it soon gets out. Especially, this mine here has so much opening going on up to the surface that it gets rid of the smoke. The air down there is a little cooler than what's outside, but in the winter it's quite a lot warmer than what's outside. [laughter] It's a nice place to work. I love it. I've been like that all my life, and I still love it.

#### **Decision Making**

I think my best skill was to be able to realize where the ore was without seeing it. It just came to me. I had that theory of where it should be, and I can't help it. I've still got it today. I'll have it until I guess I die. I thought all people were that way, but they say, "No, *no*." I know now none of my family was that way. My dad was a partner in a mine, but my brothers and sisters, none of them were miners. It just happened to be born in me, and I'm very happy with the way it turned out to be.

There were geologists that would tell them where the ore was (seems like the guy's name was Wilford). A lot of times I disagreed with him. On the upper level (that was on the 950 level), we mined that pretty well all out, and I asked the super, I said, "Where do you think we ought to put those men?" 89

He said, "Well, put them down there where the slushers are." The slushers are what you use to pull the ore into the chutes. I looked it over, and I said to myself, "Now, it don't make no sense to go this way." So I went the other way. I found some pretty good stuff. About the third or fourth day we were talking in one of these upper levels, and I said, "Is that where you wanted to put the men?"

He said, "No, Merle, I told you down there where the slusher is." But the next morning I went up there after we blasted, and we had maybe two foot of ore coming in the back. I hurried up and got a sample down, so it would go through the assay office, and we'd get it back that afternoon. And when we got it, he said, "Where did you get that sample from up there?"

I said, "In there where you told me not to go? [laughter] I thought we ought to have another round." The next morning we had eight foot that run over two ounces. I could get thirty, forty, or fifty ton a day out of there with about three or four men, because we all just set up the machines and slabbed it.

While I was shift boss for the Black Mammoth, the geologists all figured that a roll on the intermediate level cut that ore off, but I didn't think so. When Cord took over, that was the first thing I tried to do. I wanted to go up through the tunnel and go up in there again to where that ore was supposed to be. Anyway, after I'd found this other one up on the 950 level, then Cord and the super's sitting there one day, and they got a talking, and they said to me, "Merle, where is another good sweetener in there?"

I said, "Down there in the Drinkwater where you told me not to go."

He says, "Well, the geologist says that roll cut that ore off."

"Well," I said, "I don't think so."

And he said, "If you don't think so, you go ahead."

I said, "Well, I don't have a miner to put in there right then." But I'd drill a round and blast in there. Then I'd have a mucker getting everything



The Mary Mine crew in 1938. (Photograph courtesy of the Central Nevada Historical Society.)

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ready so I could go ahead and drill another one that night. About the second or third day, the super run up in there, and he said, "Now Merle, you told me you didn't have a miner to put in there, but the best miner on the hill is up there." [laughter] I didn't tell him it was me that was drilling all of that. Well, when we got up in there, the ore was there just like I figured it was. So the roll doesn't cut it off, and in a lot of places I had two-ounce ore. After a couple of times, whatever I wanted to do, I always had full go-ahead to do it.

# Accidents

I didn't want men who were drinking to work in there, because it's dangerous—very, very dangerous—for anybody that drinks to ever be underground or anywhere else. If you're sober and watch yourself, well it's like anything else outside. It's not as dangerous as you think it is. I've had a loss . . . one man up here, but if they had done what I wanted them to do, we wouldn't have lost that guy, I don't believe. You see, that hanging wall was pretty loose, so we had a lot of good ore underneath there. What I wanted to do is to clean that ore up as quick as we could and then blast that down, but the super said, "No, I think what we ought to do is timber it." When they went to timber it, that darn deal broke and fell down, knocked him down off there, and it made him paralyzed, so he died in about a week.

When I worked up here on the intermediate level, when I was working with the timber man, we were trying to hold that stope from falling in. The stope is a big, open, underground deal, and we were trying to hold that. It's nothing to have a timber right here underneath, and that timber's a breaking while you're trying to put another one in, to try to hold it. I got a scar here on this finger where this sliver came off of one of them and tore my thumb pretty near off. There was nobody in there, only me and the other guy. They wouldn't allow anybody to go in there. It was dangerous in there where I was working, but you have to know what you're doing.

#### **Reflections on the Mary Mine**

I still say that this mine has to be underground mined, because with an open pit you get too much waste with your ore, which lowers the grade too much. It's not an open-pit mine. Now there's a lot of places where it's an open pit, but these underground stopes are not big. If they were, we'll say, four or five hundred feet wide, yes. But they're not. About eight, ten feet that's a pretty good-size stope here.

When I left there was still good ore here. We weren't out of ore. We shut the mine down just because we couldn't get things to operate it when the war broke out in December of 1941. We couldn't get powder to operate the mine. We had two holes that we had in ore—one down over here, and then there's one up on the upper level that was in pretty good ore. But we never did do any work to get to that ore. Over here in the hill, we had one place we 91

just hit sixteen-ounce gold (or sixteen ounces of silver). When I left there, I blasted that in. They asked me to, so I did, and that ore's still here as far as I know. The vein's about four feet wide. I can remember that, and I'd like to have it, but I could never get it.

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Cord had us pull all the rail and pipe out of the mine, because he figured the war would go on for several years, and he didn't want to leave the pipe and rail in there for some reason. We started taking it out of there about sometime in January or February. We didn't get it all out of there until . . . I think it was July. Over five million dollars came out of here while Cord had it. He told me that at one time. It was over five million being taken out, but he didn't say how much expense he added to that.

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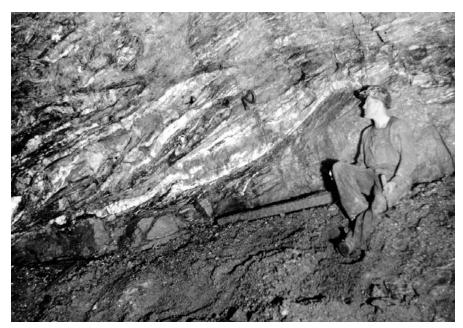
## LEON HILL: HAULING ORE

Fayette Hill's son Leon was born in California, but has lived most of his life in Nevada. In 1996 oral history interviews, his memories of his youth and young adult years in Silver Peak were distinct and detailed. He recalled the Mary Mine and the hard work of mining and hauling ore.

## The Mary Mine

After digging that ditch [for one of Vollmar's mills], I went to work at the Mary Mine. There was an interesting thing about the mines. They had some real serious earthquakes there in the 1930s centered over around Mina. You could follow where the earth had opened up for, oh, several miles across from Gabbs toward Tonopah. It had also opened up in a few places on the Mary Hill. My Uncle Frank, who had studied the maps of this mine, figured that where the Silver Peak Pittsburg Mining Company's mine had caved in, there was a pillar that should be in about the area where this crack was. He tied a rope to something and started letting himself down this hole. Where it was too narrow, he had a pick with him, and he just picked away, so he could get through to the bottom. He found ore down there. He found some on the hanging wall on the way down. He started to mine that, and he hired a couple of people. They made an opening, and he took a considerable amount of ore out of there. He made a lot of money out of that hole.

Most of the Silver Peak area's gold ore came from the Mary Mine. Oh, some came from the Orovada, and some came from the Valcalda and other properties up there, but the bulk of it came out of the Mary. We always thought of the Mary as the whole hill, although I think they called it Mineral Ridge. In the early days the Silver Peak Pittsburg Mining Company hit this great big stope of ore. It was tremendous! Well, they wanted to get all of the values out they could, so they mined that all the way up to the hanging wall and all the way down to the foot, so they were getting about all of the



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"In the early days the Silver Peak Pittsburg Mining Company hit this great big stope of ore. It was tremendous!" A gold vein in one of the Silver Peak mines. (Photograph courtesy of the Nevada Historical Society.)

high-grade ore that they could get, because you had to have high grade in those days with prices at twenty dollars an ounce. Instead of putting in timber like they so often do in a lot of mines, they were leaving these large pillars of ore until pretty soon they exhausted this big ore body, so then they started to back out. And they started taking the pillars as they backed out. They were just as valuable, maybe more so, because it might have been right in the heart. Well, they took so many pillars out that the darn thing caved in. They didn't think it was worth trying to dig everybody out to get those pillars, so they just walked away from them and left the bodies there. It was way before my time, but that was the story—that there were bodies left in there.

Later on, when I was working for the Black Mammoth Mining Company, that was their goal—to go back at this one particular tunnel. A few of us working there, we wanted to try to hit one of those pillars. We thought we were getting pretty close to it, and we started a raise. We hit what they call gob, which was the waste material, and it was all loose in there, because it had caved in. This started coming down, so we discontinued our raise for a cross-cut. They said, "Well, dig some of that dirt out. That might be just a little bit of gob coming in there." And so we were digging this out, and we made a hole in there up above us, big enough that a person could go through it. This old miner (I say old, he might have been thirty-five or forty), he climbed up in there, and right after he got up in there, we heard a whooshing, and that hole filled up with dirt again. So he's stuck up there. Fortunately, there was a cavern right there, so he was safe; he wasn't caught in that slide. There was a guy working with me, and we started shoveling as fast as we could. Then I called down and caught the guy that was taking the dirt out and dumping it. I hollered and told him to get some help up there; we had a cave-in. So guys came up to help. We just kept digging and digging. The guy who was trapped had some old powder boxes up there, so he took those and shored it up around in there, so it would stop sliding. When we got a hole about so big, he said, "When you see my feet come, jerk." So he jumped, and we jerked. [laughter] We got him out.

The Black Mammoth decided not to fool around with that anymore. They said we could have the lease on it if we wanted. A fellow by the name of Wild Bill and me, we took the lease on it. We shoveled out this place where all of the gob was. We thought we were at the edge of that pillar. We got up in there where that cavern was, and we widened that hole to the left, so we went away from where the gob was coming. We got up into this cavern, and the hanging wall overhead, it went about forty dollars a ton in gold ore. It was in a limestone: it wasn't in quartz. We got a carload out of there, and our share was worth about \$1,000.

I was convinced by that time that we hadn't hit that pillar, but I thought it was exhausted, so I said, "Well, I think I'm about to quit this thing."

My partner said, "Well, I've got a friend that I think might want to buy it."

So we sold it. I got a thousand dollars out of it besides what I got for the shipment. They made wages out of it by picking. They found enough . . . well, you'd call it float if you were in placer country. They found enough ore in there to pay wages, but they never did make any money in there.

We knew there had been a cave-in. How else would the powder boxes be up there? And besides that, this cavern had been drilled out for sure. You could see the drill holes where they had been blasted. Besides that, we found some bones. I had heard the story about these Mexicans who had been killed in there, but we didn't ever bother with those bones. I didn't have enough sense to have the bones checked out. We didn't know whether they were human or animal. The Mary Mine had all kinds of openings. An animal or something could fall down a hole and die in there.

#### **Driving Truck**

Silver Peak had a lot more snow than we liked, especially when I was driving truck up and down Mary Hill, because that's a pretty steep hill. [laughter] They always kept a Cat (Caterpillar) up there, and they'd clear the road a little bit, but you had to put chains on and all that—heck of a nuisance. I drove truck for Jimmy Morris. He started working in the mill for my dad, and he worked there for quite a while. When the mill started going pretty good, they had some old truck that was hauling the ore for them. I think the company was doing it for themselves, but this wasn't satisfactory, so Jimmy

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"Silver Peak had a lot more snow than we liked, especially when I was driving truck up and down Mary Hill." Jimmy Morris's trucks in 1937. (Photograph courtesy of Leon Hill.)

Morris went to Vollmar to see if he could get a contract to do that. Vollmar said yes, because he needed a little bit of help and didn't want to fool with it. So Jimmy managed to get credit with Parker over at Goldfield, and he started out buying a Ford dump truck to haul ore.

Later, by using innovative means, the miners kept managing to raise their tonnage more and more, and Jimmy couldn't keep up with one truck, so he got two. Then they started to build that other mill, and by that time he had financing and bought some big trucks. At first they were just bobtail trucks—that doesn't have a trailer. The GMC was called a T95 in those days, and it was just a big, heavy-duty truck—great big engine, powerful and it had six wheels, duals on the back, and it drove on all four back wheels. That would haul about ten or twelve tons. Well, then later as the tonnage kept increasing, he put semitrailers on there. Then he could haul around twenty tons.

The main challenge was to keep from driving off the cliff and getting killed, because the road is both steep and narrow. [laughter] But then it wasn't all that bad; you got used to it. I would take that T95, and right after leaving the bin where you load—about a hundred yards or so down the road, there's a place where you have to turn around a hill. Well, these tires were very expensive, and in order to avoid breaking them against these rocks on the side of the hill, you had to drive way out on that edge. In fact, that truck was so rigid that you could put your right front wheel over the edge a little



"The main challenge was to keep from driving off the cliff and getting killed, because the road is both steep and narrow." The road down from the Mary Mine. (Photograph courtesy of Sherry Mattei.)

ways there, and it would still hold upright. Then you'd pull around the corner, and that's the way you could miss hitting those rocks along the walls with that back tire. I always wondered why they didn't use a little bit of dynamite and knock some more of that hill off, because I wasn't always so anxious to do it, especially if there was snow on the ground. But I didn't want to break a tire either.

One time we were right up on the top of that hill.... There was a Northern Transportation truck ahead of me hauling a load of supplies up the hill, and I was coming up the hill empty. I was waiting for him down below, and he got about two-thirds of the way up the hill, and he couldn't make it. (I don't know why it wouldn't pull that load. Our trucks were made for that. They were low-geared and had powerful engines.) He stopped, and then the driver was afraid to try to back down. He couldn't back down anyway, because it was around a sharp corner and up that steep pitch. So they had to send up for a Cat to come down and pull him up the hill.

Vollmar came up there after a while. I guess the word got down to him, and he told me, "Well, I got to get up there."

I said, "I can't get out of here with everybody behind me." There were a lot of cars lined up by then.

He said, "Well, pull up a ways."

He didn't want to walk all the way up that hill to talk to the driver, so I pulled up behind that truck, and the driver of the Northern truck put a couple of rocks behind the back wheels. He had his brakes on, but he put rocks behind it because he was afraid it would roll back anyway. About that time the Cat came down to hook onto it. They weren't hooked on to it yet when I could hear the brakes start to release: I could hear the air leaking. I

said, "Don't let that brake go till you get hooked up!" And that was too late. The sucker, he took the brakes off, and it just went right over the rocks and came at me.

I hollered to Vollmar, "Get out of there!" hoping I could back down, but he didn't get far enough, so I stopped. I put on all my brakes, because I figured otherwise we're going to wreck all these cars that were at the bottom of the hill and me, too, and it wouldn't make the boss very happy. He ran into me and mashed up the whole front end of the truck. Oh, it was an awful mess!

There was no snow that day. It was perfectly dry, but you can just imagine going up there in the wintertime. It wasn't usual to have to stop and chain up going up or down. With snow on the ground, even with chains, and particularly after they'd run over it a while, and it starts getting hard and slick, you'd kind of toboggan down that hill. You'd go a ways, and then brake and then go again. [laughter] It was an exciting job. But I was just a kid. I never thought about the danger.

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#### **RUBY GRIFFIN: LIFE AT THE MARY MINE**

Ruby (Shirley) Griffin was recognized as Silver Peak's matriarch at the time of her oral history interview in 1996. If a stranger arrived in town asking for historical information, the automatic response was, "Have you talked to Ruby yet?" Born in 1910, Ruby had lived in Silver Peak since about 1933. She arrived as a young, divorced mother needing a home for herself and her son. There Ruby met and married a miner named Ernest Shirley, and they began their married life living in a home near the Mary Mine.

Ernie had a house up there at the Mary Mine. He was a leaser at that time, he and Stanley Chiatovich. They had a company between them, and back then they only had about four or five men working for them on this lease. It was a three-room house, and it was right on the hillside where you could look all over this big, immense valley down here. I just loved it. I thought it was just grandeur to have that three-room house. The rooms were nice size. The kitchen and dining room were



Ruby Griffin. (Photograph by Victoria Ford.)

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The Mines together, and then we had the living room and the bedroom. We put my son in the living room on a cot that we bought secondhand. There was a big step outside, and we had chairs out there. I guess they built it meaning it for a porch, but it didn't have a roof over it. In the bedroom there was a closet, and then in the living room there was a nice-sized closet, so I had plenty of storage space. There was no running water. It had to be hauled up there in a barrel.

There is a funny story about the privy. [laughter] Whoever built it was a clown, and they built that on stilts. You had to go out across this rickety walk: it was a regular little bridge with a post and a railing built that you could hold onto which ran all the way to the building, but just on one side. It wasn't that wide, eighteen inches. Ernie used to watch me go out there, and he always told me, "Don't forget to hold on to that all the way. Let your hand slide along." [laughter] He could just see me falling down there about fifteen or twenty feet.

This house was built downhill from the road, where you walked over to the mill. Apparently, whoever built it worked at the mill or perhaps was the mill foreman. Where the road turns there's kind of a V, and there used to be a bar there. I was glad we weren't on the same side of the road, because so many men were going to the bar and back all that time, and they might have gotten in a habit of thinking they had to stop. But to get to our house, they would have had to come down this trail that was pretty steep. [laughter] We both liked that idea, for privacy. When we were sitting on the porch, we would hear them going by up there. As a matter of fact, some of them had the habit of bouncing rocks off our roof. It was a good thing that we had a tin roof, because you would hear a bang! (At the mine, Ernie went by the name of "Mac.") And they would yell down, "Are you awake, Mac? Are you down there? What are you up to?"

We lived near the Mary Mine for about a year, but we had to move into Silver Peak, because it would have been too much of a nuisance to try to drive all the way into town, especially in the wintertime, so my son could go to school. The house where we're living now was for sale, and so Ernie just bought this. We moved down here, and I have been here ever since. [laughter]

Then they drove back and forth to the mine every day. There were other miners that needed to go up, and so did Stan (he and Frances were married at that time), so they bought this car—a Marquette. They used to haul the miners back and forth. They had a carload every time. Those old cars, they were built roomier, and they would just pile in there. [laughter] If more needed a ride they'd make room for them, because some of them that lived up there would come down here and stay overnight lots of times. Whoever wanted to ride was welcome.

**98** The

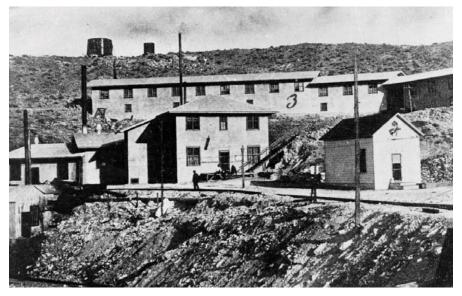
Mines

## Buildings at the Mary Mine

The bunkhouse at the Mary Mine was a two-story building. It was built out of real good lumber, so it was sturdy. There were two bunkhouses up above, and that big building had rooms all up above it. The cook and whoever was running the place at the time, they had living quarters up there. It was there when I was living near the Mary Mine. It had been there for years and years—even back when the old road was there, and they hauled the ore out by horses and wagons.

At that time everything was full up there. There wasn't a building that was empty. Everyone that lived up there was always doing some work on their building, fixing it up and keeping it repaired. Transportation was a problem for the working men—the expense of gasoline going back and forth and the wear and tear on the cars. The road was worked and passable all the time, but it wasn't a good road. A lot of people down here didn't like to drive their car up there at all. It was steep, and a lot of the cars had trouble getting up there.

During the Depression years there were good jobs available here. They didn't have trouble getting miners. Of course, by law anyone under twentyone couldn't go underground, which was a good law. At that time they didn't allow any women in mining. There were a lot of places that women couldn't work, because they weren't strong enough. Later the court said women could apply, but the mining companies wanted men. When it comes right down to it, women are not as strong as men.



The Mary Mine boardinghouse (2) and bunkhouse (3) in the 1930s. (Photograph courtesy of the Central Nevada Historical Society.)

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## NIVLOC SILVER MINE

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The Mines While the ore found in the Valcalda and Mary Mines was rich in gold, the district's mines also produced silver. Both gold and silver played a part in the Vollmar family fortunes. Around the turn of the century, the area's richest silver mine was discovered about eight miles south of Silver Peak by a Native American prospector, Tom Fisherman, who worked for Harry Stimler. Stimler was well-known as one of two men who discovered the ore bodies at Goldfield, a mere forty miles away, so for a short time this silver-rich lode was known as the Stimler Mine.

Then a Chicago millionaire by the name of W. H. Colvin bought the mine and named it after himself, only spelled backwards—the Nivloc. He hired Fred Vollmar Sr. to work the property, and over the next twenty years a small town grew up the sides of the canyon. When Colvin became discouraged about the returns on his investment, Vollmar took over the property. After his father's death, Vollmar Jr. acquired the Nivloc Mine and organized the Red Mountain Mining Company in April of 1936 with associates R. J. Carnall and T. W. Warner. One short year later, Vollmar's group sold the Nivloc to stockholders in a Canadian corporation. They formed Desert Silver, Inc., and operated the mine for more than five years.

While there apparently was no major union movement in the Silver Peak area, union organizers were in town. Pete Loncar, who as a young man worked at the Nivloc in 1937, recalled rooming with an "Okie," as the migrant farmers from the Dust Bowl era were called. He saw firsthand how union men at the Nivloc harassed Okies, taunting them for being willing to work for food and at lower wages.<sup>10</sup> Another union is on the record books, the Silver Peak Mine and Mill Workers Association. However, there was some question whether or not that was under Vollmar's control.

Notes

1. There is no agreement on the correct spelling of Oromonte, and official documents show both Oro Monte and Oromonte.

2. Mehls, conversation, 1998.

3. In his oral history interview, Jack Brodie, son of one of the original owners, W. E. Brodie, refers to "Swenson," while other sources spelled the name "Swanson."

4. This is one property that was never absorbed into the Vollmar empire.

5. WCRM, 3-35.

6. During surveys, archaeologists located one of the narrow roads that was supported by a dry-laid, rock retaining wall. WCRM, figure 5-15 and page 5-32.

7. WCRM, 3-38.

8. WCRM 7-36. While a hospital building appeared on a 1919 Pittsburg-Silver Peak Gold Mining Company fire insurance map, it had disappeared by 1927, and oral history interviews generally agreed that the closest medical help was to be found in Tonopah and Goldfield.

9. Part of the oral history was recorded on videotape, and Merle refers to items that could be seen.

10. Pete Loncar oral history, unpublished, in the collection of the University of Nevada Oral History Program.

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# **5** The Mills

## THE SILVER PEAK MILLS

When construction began anew on mills in Silver Peak during the Vollmar years, it was more than a show of prosperity. The renovated Chiatovich Mill had failed and older mills were dismantled or removed from the district, so mine operators were left with little choice—pay shipping costs or build new mills. They chose the latter:

... the mills built during this period were small in capacity, with the size of the mill being adjusted to accommodate the volume of ore expected to be produced by the mine it served. The custom milling of ores occurred only when mill capacity was available.<sup>1</sup>

The Vollmar Mill (1930), the Rock and Keeler Mill (R and K, 1930), and the Gordon-Brodie Mill (1936) were built during the heyday of the Vollmar years. Earlier, Harry Stimler tried to revive the old Fanchini-Hughes Mill located near the butte at the north edge of town. He even invited dignitaries like Governor Fred B. Balzar and George Wingfield to a barbecue in November of 1927, but Stimler's plans fizzled. By 1928 Vollmar Jr. took over through his Liberty Divide Mining Company.<sup>2</sup> Within a short time the tenstamp amalgamation mill was processing ore from the Black Mammoth Company's Mary Mine. Retrofitted from a cyanide to a flotation system with Hardin equipment, it supplemented the fifty-ton Vollmar Mill.

Across the road John Chiatovich's oldest son, Martin, directed operations where the Mohawk-Alpine Mill and the Pittsburg Silver Peak Company's tailings plant had been. Fanchini and Hughes built a one hundred-ton cyanide plant to treat tailings from the Mary Mine and began operating in the fall of 1930. By the following June new tanks were added to increase the capacity to three hundred tons.<sup>3</sup>

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	Early Entrepreneurs	
	1893	Chiatovich Mill, a fifty-ton cyanide mill in Silver Peak. In 1928 it became the Calvada Mill and in- creased to seventy-five tons, but it finally closed in 1929. Then the R & K Mill was built on the north edge of town to replace it.
	Pittsburg Era	
	1906	Mohawk-Alpine Mill, north of Silver Peak across from the Hot Springs. In 1931 it became the Fanchini- Hughes Mill, with a three hundred-ton capacity and Martin Chiatovich as superintendent.
	?	Blair Mill outside the town of Blair, three miles north of Silver Peak.
	1927	Fanchini-Hughes Mill, a one hundred-ton cyanide mill (at the 1867 site of the SP&RMG&SMC Mill near a butte on the north edge of town). Fanchini- Hughes Mill in 1928 experienced a sequence of own- erships by Black Mammoth Company, Liberty Divide Mining Company, and Lucky Boy Mining Company, all Vollmar's companies.
	1930	Fanchini-Hughes Mill received a major upgrade.
	The Vollmar Years	
	1930	R & K Mill at the north edge of Silver Peak
	1930	Vollmar Mill, a fifty-ton flotation mill in Silver Peak.
	1935	Black Mammoth Mill, a one hundred-ton cyanide mill, was built adjacent to the Vollmar Mill in Silver Peak. It burned down in 1940.
	1936	Gordon-Brodie Mill at site of Gordon-Brodie Mine.
	1938	E. L. Cord Mill, a three hundred-ton cyanide mill near the Mary Mine. Closed in 1942.

Vollmar directed both mills located in downtown Silver Peak. The mill to the north, known as the Vollmar Mill, was built in 1929 and designed by a well-known metallurgist named Albert Silver. The Vollmar Mill was considered small at fifty tons capacity. It contained a "Blake jaw crusher, ball and gyratory crushers, Dorr classifier, Wilfley concentrating tables . . ." all technology readily available at the time and ". . . demonstrating a clear move away from the traditional stamp crushing systems that had marked the earlier periods."<sup>4</sup>

Vollmar hired Fayette Hill to oversee the mill's operations, and his brother Frank helped with construction and hauled ore to the mill. Both Hill brothers were known for their ability to forge new parts for machinery. Fayette's son, Leon Hill, recalled being about eleven years old when he sat on the hill above the mill watching a group of men slide a heavy ball mill, inch by inch, down to where it would be installed.

Next to the small flotation mill was the huge, one hundred-ton cyanide plant. Called the Black Mammoth Mill, it was built several years later, probably between 1935 and 1937.<sup>5</sup> In fact, when banks were closed in Nevada during the Depression, Leon's father used his postal savings to pay for materials to finish construction on the mill. Leon worked operating a compressor for a millwright named Birch who was in charge of that construction project. Bob Douglass and a group of strong, young men also worked on the construction of the mill.<sup>6</sup>

The timing for construction on the Black Mammoth Mill is interesting. On the one hand, banks were closed, which caused difficulty with cash flow.



"Vollmar directed both mills located in downtown Silver Peak." The Black Mammoth and Vollmar mills, c. 1934. (Photograph courtesy of Stewart Carnall.)

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At the same time the price of gold increased. "Under the Gold Reserve Act of 1934, the price of gold was raised from \$20.67 to \$35 an ounce, as of January 31, 1934."<sup>7</sup> Better prices made lower-grade ore worthwhile, but the process for extracting the gold needed larger mills than ever before, again requiring more investment dollars. For example, the 100-ton Black Mammoth Mill in Silver Peak and the 300-ton Cord Mill built in 1938 near the Mary Mine were both considered large-scale operations for their time, and both were built with money invested by E. L. Cord.<sup>8</sup> Once the "big mill" (as the Black Mammoth was also called) started production, the smaller Vollmar Mill was shut down.<sup>9</sup> The Black Mammoth Mill burned down in 1940 leaving only the E. L. Cord Mill operating in the district until World War II shut down the gold mines.

## BOB DOUGLASS: BUILDING VOLLMAR'S MILL

Bob Douglass was born and raised in Tonopah, Nevada. Bob's father, William James Douglass, was superintendent of the Tonopah Midway Divide Mining Company, but he discouraged his sons from mining to protect them from the deadly silicosis. After his father's death, Bob raised himself, finished high school, and then held a variety of labor jobs during the Depression years. In his oral history Bob describes his job building "Vollmar's Mill"<sup>10</sup> in Silver Peak, Nevada. When he arrived in town he was young, single, and—by his own description—full of devilment.

The reason I went to Silver Peak, they were going to build that mill for Vollmar . . . the Vollmar Mill, that's the little one down in Silver Peak. The summer of 1934, I think that's when we built that mill.

Guy Birch (I think he was from Tonopah), he was the superintendent that was in charge of building of that. He was the millwright—a carpenter, actually—and he built that mill. It was through him that I got the job. He had a bunch of Tonopah kids, a bunch of Silver Peak kids, and a bunch Goldfield kids to help with the construction. They were paying us, I think, four dollars an hour.<sup>11</sup>

We dug all those foundations for the mill with picks and shovels—instead of building it with a Cat, we dug with a hand pick. There were a bunch of young guys. I guess I was about twenty-two or twenty-three, and they were all the same age, and they were full of devilment.

When we started, we were all doing the same work, because we had to dig ditches to get the foundation for this mill. And then we got different jobs. I would sneak into the office and look at old Birch's time book. And I would say, "Oh, they're going to pay a lot of money for riggers." The riggers are the guys that get up on a two-by-four and pound. Actually, they were going to pay the same thing for riggers. [laughter]



The Mills

"The Black Mammoth Mill burned down in 1940 leaving only the E.L. Cord Mill operating in the district until World War II shut down the gold mines." The remains of the Black Mammoth Mill in 1941. (Photograph courtesy of Gerry Cooper.)

And so old Birch lined us up every morning like a bunch of army kids. He'd say, "Douglass, Traynor, Clark, step up. You're supposed to be a rigger."

And they were all set on riggering, but when he came to me, I said, "No, I come from a family of miners not circus people. I'm not going to." I got to run the tugger. It was the same money, but the tugger was just like a telephone post with a cable on it, and it had a little air tugger on the bottom of it. You would tug everything up to them to use. I got to stay on the ground. I didn't want to be up there standing around on a two-by-four or an eight-by-eight. [laughter] Afterwards they got mad at me, but they didn't at that time.

Oh, we put in our eight hours, seven days a week, every day! No days off. We just got that mill built, that's all. Used to be Sundays off, but old Birch, he wouldn't let us off Sundays. He wanted to get that job done and get out of there. I think after we built the mill then we left there. Oh, I was there, I guess, three or four months. What a guy, Birch. I'll never forget him. He was a big man. He wore about a sixteen shoe, you know. He was a big man.

We never paid much attention to accidents. We weren't going for insurance in those days. They were serious accidents when something happened, and no safety procedures, no hard hats. I don't remember any serious ones.

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## LEON HILL: FAYETTE HILL AND THE BLACK MAMMOTH MILL

By the mid-1930s, more families were settling in Silver Peak. Men like Fayette Hill, who worked for Fred Vollmar Jr. as superintendent of the Black Mammoth Mill, were as deeply involved in family and community life as they were in the

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mining industry. Fayette's son, Leon, worked for his father and described the Black Mammoth Mill.

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# The Flotation Mill

My father [Fayette Hill] was superintendent of the Black Mammoth Mill, and, along with my Uncle Frank and my cousin Kenneth, Dad helped build the flotation plant [the small Vollmar Mill]. That was when Silver Peak first started to come back about 1928. He went out there when they were building the mill, and that was probably around 1929, because the banks closed right around that time. It took them a while to build the mill. First they had to level off the place they wanted, because all the land was on a hillside. They also put a tank on top of the hill for water.

The parts for the mill were shipped in from Los Angeles. The Smith brothers (three brothers and a sister who were Canadian people), along with a partner by the name of Tom Cox, went together and borrowed the money to buy a couple of beat-up old trucks to haul this stuff into Silver Peak. But right about then George Wingfield shut the banks down in the state of Nevada . . . .<sup>12</sup> I think banks all over the country were closed. The Black Mammoth had its money in the First National Bank over in Tonopah, so suddenly they didn't have any money, and the Smith brothers weren't going to bring in the material unless they were paid some money. My dad used his own postal savings to pay for the transportation and equipment. There was no bank in Silver Peak. So many people lived way out away from banks, and, also, banks were held up a lot but post offices weren't held up as a general rule. I think postal savings augmented banks nearly like a government bond now. So anyone could just go down to the post office and deposit their money. The post office paid a little bit of interest, and if you needed your money you



"Dad helped build the flotation plant [the small Vollmar Mill]. That was when Silver Peak first started to come back about 1928." Silver Peak viewed from above the Vollmar Mill, looking northeast. (Photograph courtesy of Gerry Cooper.)

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could draw it out. When the banks closed, people who had their money in postal savings could still get their money. So that's how they paid for the flotation mill.

They called it a thirty-ton flotation mill. It was built for twenty-five, but they could probably force it a little. Very briefly, the process started with jaw crushers grinding the ore just like any other mill. Then the ore went through a ball mill to crush it finer. After that the ore went over a plate, about four or five feet wide and maybe about ten feet long: that was a smooth sheet of copper. They would spread mercury all over that plate, and the copper plate would hold the mercury in place. Then the mud would come down from the ball mill over the plates, and the mercury would pick up the free gold. From there the rest of the ore would go down into the flotation system where a machine would agitate sweet oil with the ore. The sweet oil would pick up some of the minerals and put that over the sides. The balance of the material would flow down on to the concentrating table. This table was about sixteen feet long and four or five feet wide; it had twenty or thirty little metal strips about one-fourth inch by one-fourth inch that ran the length of the table. The muddy material came in over the upper end of the vibrating table and ran down over these strips. The metals, or concentrates, would work their way to the end of the riffles and then into the concentrate dryers.

Then they would clean off those plates, and that mercury would make a ball that was saturated with gold. They'd take it down and put it into a retort, which is no more than a kind of crucible with a tube sticking up in the air. When you heat that, the mercury would go up the tube in the steam and then drop out to be recovered. They could recover a lot of their mercury this way. Once it was dry it was gathered up and shipped off paid was based on the value of the gold. That flotation plant was shut down after the cyanide plant started operations.

#### The Cyanide Mill

In the cyanide plant they used the Merrill-Crowe precipitation process, and the recovery was a little over 90 percent. Again, the ore was dumped into a chute or bin on top of the hill and went down through the jaw crushers to crush the big rocks. From there the ore went on a conveyor to a cone crusher, which crushed the ore a little bit smaller before going to the ball mill, where it was mixed with cyanide solution, and as the tank got full the mud flowed out over the top and down through a screen.

From there it was pumped to a classifier, which is an oblong, open tray about twenty feet long. The tray sloped up a little and had two large rakes that went back and forth across it to rake the mud up. The purpose of the rake was to rake up the heavier stuff and send it back through the ball mill again to make sure it's ground enough to get the gold recovery. The mud that's been ground fine enough and is in solution went over the top, into a thickener, and on through the system. 109

The cyanide plant never shut down. It operated twenty-four hours a day, because if it ever stopped (depending on the size of the mill), maybe up to a million gallons of solution and mud would settle in those tanks, and then somebody had to go down there and shovel it out, which was a heck of a big job and caused delays. Once in a while the plant had to be shut down to put new liners in the ball mill. During scheduled shutdowns, the ball mill would be empty, and the material would stop going into the system. Thus, the classifier would be empty, and the rest of the system would continue operating. If the power went off unexpectedly, the mud settled in that classifier. When you tried to start it up again, it would bend the rods. The rakes couldn't move through all that mud. Actually, that never happened [the mud would have been removed], because you would have to have such a big motor to be able to start up and to move the rakes.

An example of my dad's ingenuity was that he took off the rods and exchanged them for real heavy springs. That way, when they turned the power back on, a spring would stretch until it got the rake going, and there was no damage done. It allowed the rakes to give without bending the metal rods. Later, that invention was patented by someone else, because my dad didn't want to patent it. He said, "I don't want to fool around with this." [laughter]

All he wanted to do was make it work. The fact that they were out in Silver Peak, which was away from every place, meant they had to improvise. It took so long to order parts, and half of these things had to be custommade anyway. Even Reno didn't have anything that could help in those days. Heck, there were probably only 10,000 people in Reno anyway. Dad made so many things that you just couldn't believe it.

When the ore became fine enough, it went into what they called thickeners. These were great big tanks that were full of cyanide solution, and rakes went around and round inside of them all of the time. They kept stirring up the mud, and the lighter stuff went up through the top and then down through these trays that fed it into another thickener. It went to an agitator after going through two or three thickeners. In the agitator it got stirred up good with the cyanide solution before it went through one more thickener, and then it went into the precipitating tank. The cyanide solution was then recycled back to the ball mill.

Inside the precipitating tank was a pipe right down the middle with a bunch of leaves that were two-and-a-half or three feet by five feet high. These were made of pipe with holes in the center and covered with canvas. On a regular schedule the mill operator had to dump so much zinc powder in there, and the gold would adhere to the zinc. A vacuum pump would pump the solution through these leaves and back into the system again. That would cause the zinc to stick to the leaves. When they got ready to clean up and have a melt, then they'd wash that zinc off of there, down into the driers in the smelting room. The rest of the finished mud went through pipes over to a great big filtering drum where the tailings went. The cyanide solution was

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pumped out and went back into the system where it was recycled. The mud was washed off with fresh water and then went out into the tailings pond. That finished the process.

#### **Smelting and Transporting**

Then there's the smelting. One night about 12:30 or 1:00, my dad showed up at the mill, and whoever's on duty would come down and help him shovel all of that powder up, put it into great big crucibles, and melt it with a tremendous heat. Well, you have to



Side view of the Black Mammoth cyanide mill. (Photograph courtesy of Leon Hill.)

put on protective rubber gloves and rubber boots and everything. Of course, Dad did the actual pouring. Once it was melted he poured it off. The slag came off first, and then he poured the gold. When we got all through, we had to take all the protective clothes off and leave them there. The last time that they used them, they burned them, because they might be impregnated with gold.

He'd make bars about eight or ten inches long by about three or four inches wide and maybe a couple of inches high, and they were pretty heavy. They usually only poured one bar a night, because they didn't like to let it go too long. He would dump it out, and it'd cool pretty fast. Then he'd wrap it in a sack and put it in his car to take it to Wells Fargo in Tonopah.

The insurance company required that he have an armed guard, and, generally, it was my mother. There was a weapon there in the car, but I'm sure if somebody wanted the gold, they'd have given it to them. Someone always went with him, not necessarily my mother. My dad had to go to Tonopah for a lot of reasons, and most people preferred shopping at Tonopah, which was a little over fifty miles away, so often someone else would go, but no one knew when he had the gold with him. My sister Gerry thought that she went up to the mill one time and watched them pour that gold, but I think that Gerry's having a pipe dream, because he didn't want anybody to know, not even my mother. No one knew. The guys who worked in the mill didn't even know until he started to do it, and then he had one of them come down and help him. But up until that time no one knew what he was doing, so they never knew when he was going to ship it.

One time they had a bar that was about teacup size. When they were going into Tonopah with it, some way or other it shook way back under the seat, and, boy, he like to about had a fit until they found that! But there was never any danger of it ever being stolen, except one time some guy stole 111

about twenty cans of silver concentrate or something from the Nivloc, and then took it to Mina and shipped it. But they caught him, because when they processed it at the mint, they knew where it came from. As soon as they ran their tests on it, they knew where it came from, so they knew who it was. I suppose nowadays, with all the crooks that are around, if Dad went down to process this gold, someone could very likely pass that information on to somebody else. But it seemed like people were mostly honest in those days. It's amazing how honest they were. [laughter]

At Silver Peak quitting time was three o'clock. My dad would go up there usually around seven or eight o'clock in the morning, and he'd be there most of the day. He'd leave the mill from time to time when he had to go do something, like make phone calls down at the powerhouse, because we didn't have telephones everywhere. The one at the powerhouse was the only telephone in town in the early days. If he had to make something, he'd be out at the dumps looking for an old piece of metal or something that he could make it out of. And then he might be back at the mill at eight o'clock at night, or nine o'clock, or any other time. He was in and out all of the time. Since it ran twenty-four hours a day, he was responsible for it all the time. Shifts ended at three, eleven, and seven.

# Working for Dad

I was raised around the darn mills. I didn't want to work for my dad, but I did. I dug that ditch that ran the pipeline up to the water tank above the mills (both the flotation and cyanide mills), which were owned by Black Mammoth Company. It was Fred Vollmar's fault that I was working for my dad. He said, "I've got a job for you."

I didn't want a job. I was out punching cows, chasing wild horses, having a heck of a good time, but I thought, "Well, I better do it."

But I hadn't realized I would be working for my dad until he said, "Go up and see your dad."

I dug every bit of that pipeline by hand. That was quite a ways up that hill, starting from the well right down below where my father lived. That would have been at least two hundred and fifty yards. In fact, that pump would go all night long, and I bet that made everyone real happy, but it didn't bother me. I'd go right to sleep. The flotation plant was still there, and it was still running at the time I dug that ditch. At one part the ditch went right up next to where the old flotation plant was. That son of a gun was mostly solid rock. Well, it seemed like solid rock to me. Before I dug that ditch, I don't know how they got the water up there, because I sure as heck didn't have a ditch to dig in when I dug that one. That was in 1935 right after I graduated from high school. They had water, but I don't know how they got the water up there originally for the flotation plant.

I remember my dad coming out, and he'd say, "Oh, you haven't gotten anywhere!"

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And I said, "Yes, you know this is easy for you. You're the boss. You sit in there in the shade and watch me out here digging this ditch." [laughter]

He said, "Well, someday you're going to find out what an easy job you really had."

And it's true. At quitting time, I was all through. I didn't worry about that ditch. Later on, when I had jobs that involved personnel matters and you'd ask someone to do something, and it isn't in their position description, or they didn't think they were getting paid enough, or they couldn't do it because they couldn't lift something, you found out what a problem really was. [laughter] Your responsibility didn't end at four o'clock when you went home.

#### Superintendent's Son

I don't think people treated me any differently because my dad was superintendent at the mill. If they did, it was probably because they were bitter and were taking it out on me. [laughter] But that didn't make a lot of difference to people. Like Stanley Chiatovich and Ernie Shirley, they were both big mine bosses, and Bill Graham's brother. People liked them, and they respected them and did what they were told. Either that or they quit. But they were just treated like anybody else. It's just they were fortunate enough to get the job they wanted. [laughter] Probably, half of the people didn't even know I was his son. People from out of town, from Tonopah or Goldfield, they probably knew.

After digging the ditch, I went to work at the mill for my dad before working in the mine. He fired me once. It was on New Year's, and they were going to shut down to line the ball mill, so they wanted to get it done as soon as possible and get back into operation. Well, the people in the mill had an opportunity to work if they wanted to. They didn't have to, but if you said you wanted to work, you should work. I didn't have anything to do on New Year's, so I wanted to work, because I wanted the extra money. I just threw it away, so I don't know why I wanted it. Anyway I said I'd work, but then I didn't show up.

So my mother sent my sister Gerry down . . . . At that time I was sleeping downtown in an old ruins of a building. Gerry said, "You better get to work."

I said, "OK." I think I had gone to bed at about six o'clock [a.m.], and this was about seven when I should have been at work. So I thought about it a little bit, and I was going to get up, and the next thing I knew I was asleep.

Pretty soon Gerry came down again and said, "Dad says for you to get up to work right now."

And by that time I felt awful. Besides that I'd had too much to drink, so I said, "I don't work for anyone on New Year's day." I don't think it was fifteen minutes, and here he came with my check. [laughter] That's the only time I was ever fired. That was sure a good lesson, boy! [laughter] Oh, was I

ever glad that I got fired. I was tickled to death. I went out and punched cows for a while. I liked that better than working in the mill, because I didn't want to work for my dad.

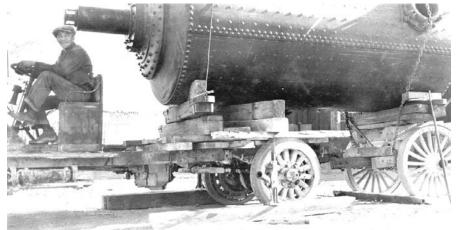
Later I worked for Dad again (that was after I was married), because someone else didn't show up, and I was familiar with the operations. We got along fine after that. I was married by then, settling down, and getting a little brains. I figured I had to work. I couldn't go fiddling around chasing cows! [laughter]

## E. L. CORD MILL

Under the supervision of Cord's right-hand man, Arthur N. Sweet, the Cord Mill was built to process ore produced by the Black Mammoth Company's Mary Mine. The Cord Mill was a three hundred-ton leaching plant and also processed ore from fifteen lessees who worked under the supervision of Stanley Chiatovich, grandson of John.

The equipment for the Cord Mill came from the abandoned mill of the Como Mines Company at Dayton, Nevada. The mill and machinery were bought at a sheriff's sale, dismantled, hauled to the Mineral Ridge District, and reassembled.<sup>13</sup> Improvements made in 1939 were coordinated with the Dorr Company, one of the leading cyanide-mill design and equipment companies of the period, so industrial-scale Mineral Ridge mines were taking advantage of the best technologies available at the time.<sup>14</sup>

Like the Black Mammoth Mill, workers at the E. L. Cord Mill kept it operating day and night, grinding the ore and extracting the precious gold steady work, round-the-clock shifts, seven days a week, every day, with the possible exception of Christmas. The Cord Mill operated just four years before it was closed by War Board Order L-208 in 1942.



"The mill and machinery were bought at a sherrif's sale, dismantled, hauled to the Mineral Ridge District, and reassembled." (Photograph courtesy of Sherry Mattei.)

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## VIC KRAL: THE E. L. CORD MILL

Victor Kral has had a long career in the mining industry, primarily in Nevada. Kral's oral history covers his wide range of experiences, from underground copper mines at Ruth, Nevada, and the E. L. Cord cyanide mill at Silver Peak, Nevada, to surveying, mapping, and exploration geology. After spending fifteen years looking after mineral rights for Ford Motor Company in the Upper Peninsula of Michigan, Kral returned to Nevada where he continues to work as a consultant and part-owner of VEK Associates. A graduate of Mackay School of Mines during the Depression years, his first job after college was working at the Cord Mill in Silver Peak.

In December of 1938, before the school year was over, S. Power Warren came to talk to us at the Crucible Club, a club of mining engineering students. S. Power Warren was a fairly well-known metallurgist from Denver, and I guess he had a pretty fair reputation. He had some kind of ties to the Colorado School of Mines. He was the designer and the mill superintendent of the Cord Mill in Silver Peak. He was certainly looking for people that had had cyaniding experience.



Victor Kral. (Photograph by Victoria Ford.)

Actually, the whole operation (mine and mill) was called the Prescott Lease, although the mill itself was commonly referred to as the Cord Mill. The mill was not a lease, but the mine was a lease, and, therefore, the mill was built for the Prescott Lease.<sup>15</sup>

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I was hired as what they referred to at that time as a solution man. In other words, I took care of the cyanidation process. I had nothing to do with the actual milling, the grinding of the ore. And that was usually the way that was handled in those days. One man in a mill would handle the grinding part and possibly the flotation with it, and another man would handle all that was involved in cyanidation. It took two men to run the mill for each shift, twenty-four hours a day, seven days a week. Shifts were ordinarily 7:00 to 3:00, 3:00 to 11:00, and 11:00 to 7:00. We rotated shifts every two weeks. It takes about ten to fifteen men to operate that mill continuously. That allows for rotation and everything.

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You're on the whole time. You don't consider breaks in this business, because actually, if everything's going right, that's your break. You really don't have to do anything—just stand there and watch things; that's all. If things are not going right, why, you might have too much solution in one particular place or some sand spills, then you'd be moving rather fast—turn off pumps, turn on pumps, and regulate them. These pumps were small, centrifugal pumps and very good, because you could turn the valves off against the pump; that made no difference whatsoever. Or you could turn the valve half on, and you could control it very well.

They had very good equipment in that mill. Practically all of it was brand-new. I'm sure that the grinding unit came from some other place. We also had what we called a rake bowl classifier that came from Weepah. As is very common in the mineral industry, sometimes you have to cut things in half and put them back together again, and that's just what they did to this classifier. In order to move it, they had to get it into smaller pieces. They had to cut it with a torch, more or less in half, and then welded it back together again at the mill. I don't think I had even heard of that before. Since then I've run into all kinds of things . . . large pieces of equipment being cut and re-welded together, but this was a new idea to me. It was about twenty to twenty-six feet long and about twelve feet wide, so it was too long. They cut it in half crosswise. In other words, they cut the length in half.

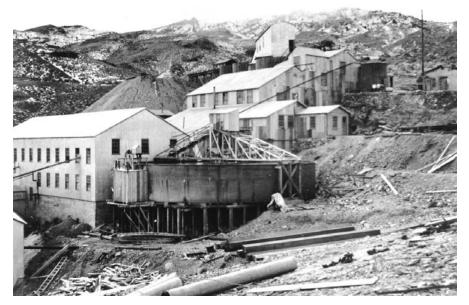
For the cyanidation process, you would make sure that your cyanide solution was at the proper level in the tanks and that the sands in the tanks were being properly discharged from one and going into the other. There was quite a bit of checking of the valves to make sure that the solution was going to the proper place in the proper quantity. All the pumps were on the lower level. And you're talking about something that's about like a threestory building, and so it took young men who were rather agile to operate this, because they'd be running from the top to the bottom quite frequently.

Of course, the ore went through the grinding unit, and from there it went through the flotation process. The flotation process is where certain reagents are added to the pulp, and the pulp is then run through rectangular tanks and, by the addition of air at the bottom, causes a mass of bubbles. The mineral which you are trying to float adheres to the bubbles, comes to the top, and floats over the side of the tank, and it's collected. And, of course, this is a rather involved process requiring special attention to the feeding of these special reagents.

The concentrate then went through the cyanide process. This cyanide process was entirely separate from the sand leaching that went on just below that. The cyanidation of concentrates was rather new, because they sometimes are difficult to cyanide, but in this particular case it worked. The part of the crushed ore that went through the flotation process was the fines or the slimes. But the sands went directly to the lower part of the mill, which was the sand-leaching part. There were six tanks there, and the sands first went to the upper three tanks and through a distribution system, which is

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"You're talking about something that's about like a three-story building, and so it took young men who were rather agile to operate this, because they'd be running from the top to the bottom quite frequently." The E.L. Cord Mill at Silver Peak. (Photograph courtesy of the Nevada Historical Society.)

rather unique and very old. The sands were distributed evenly in the tanks and leached there by the addition of cyanide solution, which was drawn off the bottom. Then after a certain length of time (being two or three days), the cyanide solution would be drained out of that tank. The sands would be sluiced from that tank to a lower set of tanks, and by doing this, the sands were aerated; they were put in a different position in the tanks to get away from the possibility of channeling in the sands. The cyanide is distributed evenly in the tank, but then there's always a possibility of channeling, and by moving the sand again to another tank, you get away from this problem.

It was a unique method of sand leaching. I had never heard of it before, and I don't know that it's been used very much, but apparently it was an idea that S. Power Warren came up with. And I think it was a good idea. It adds oxygen, which is necessary for the cyanide process. There was one peculiar thing about that system, though. Because of this continual sluicing of sands from one tank to another, you put a lot of cyanide into the atmosphere. And we always noticed that when we were working there—a slight odor. That quantity is not poisonous, but it was a little bit objectionable.

In going a little bit further in the process, there is a hazard, and it did cause some trouble. The cyanide solutions, what we call the pregnant solutions that carry the gold, go through a precipitation process. It's a bag precipitator, wherein zinc is combined with the cyanide solution. Then the gold replaces the zinc and forms a black sludge that contains the gold values. This black sludge, or precipitate, is then dried and put through a furnace to melt down the bullion. At this particular mill, to dry the precipitate they used drying pans, wherein the precipitate was put in rather large, flat pans with heat underneath to evaporate the water. Now, what's dangerous here is that you're dealing with zinc precipitates, and when you heat zinc, you put off zinc fumes, which are poisonous. At one particular time there was something wrong with the ventilation, or they got too much heat under the zinc precipitates, so the fumes were extreme in the mill, and everybody in the mill became sick. I think they had a combination of diarrhea and vomiting. I was lucky; that happened when I was off on a long break, and I was out of the mill. The company took very good care of everybody and brought in medical help immediately.

To transfer sands from one tank to another was new to me. Large-scale sand leaching, as this one was, was not done commonly in those days. Sand leaching is an old, old cyanide process that had been used for many years and was very common in the very early part of the century. But it was not common in the 1930s and 1940s.

Ordinarily, in the cyanide process the ore is ground to a finer state, and then goes through a counter current decantation cyanide process, where everything is in pulp form. You're not handling any sand. Everything is ground finer and is handled in pulp form.

A great deal of testing is done before a mill is built. The nature of the ore, the way the mineralization occurs in the rock, will determine the metallurgical process you use to get the gold out of the rock. S. Power Warren must have made many tests on the ore, and he must have decided that he could get the values out of the ore without grinding it so fine. Therefore, he saved quite a bit of money in grinding, and it worked just as well. Apparently, the ore was such that the values were in the cleavages, so that very little grinding would release the ore. Just as today we're doing a lot of heap leaching: if the ore is merely crushed, the cyanide solutions can permeate the cracks in the rock, and thereby remove the values. Much the same general idea, but here we used the sand-leaching system.

There were two other mills right in Silver Peak using the cyanide process. I guess there was a mill operating west of Silver Peak; the Sunshine Mine was operating there. It was probably there before the Cord Mill, but these other two smaller cyanide mills in Silver Peak were there long before the Cord Mill. One was the Chiatovich.

Flotation became rather important in the 1930s, and, actually, the original name is froth flotation, whereby certain chemicals and air are added to the pulp. The air facilitates the formation of bubbles, and the chemicals, of course, promote the bubbles. The gold, silver, or sulfide minerals adhere to the bubbles and rise to the surface, and then they have a simple means to scoop that froth off. And that, of course, is then filtered and dried and shipped to the smelter.

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The flotation system can be used separately or in conjunction with the cyanide system. At the Cord Mill it was used in conjunction. There the flotation concentrates (instead of being shipped) actually had their own cyanidation process, whereby the cyanide solutions dissolved the gold and silver in the flotation concentrates and eventually went through a bag zinc precipitation system and then to smelting on the site.

Flotation was still a fairly new technology. Even in the 1930s it hadn't been around very long, but it was a very common method. It was used almost everywhere. Just like so many new systems coming in, why, in the 1930s they thought flotation was the answer to all our problems. Of course, it wasn't.

Amalgamation is an extremely old system whereby the gold pulp or slurry is put in contact with mercury in one way or another, and the gold and silver (free gold and silver that is) adheres to the mercury and forms what we call an amalgam. That amalgam is collected, either by gravity or on silver plates, and then it is put through a distillation process, where the mercury is driven off, leaving the sponge of gold and silver behind. It could be used in conjunction with the cyanide process. If you had free gold it would be very logical, almost imperative, that you used amalgamation to retrieve the free gold. Cyanidation does not work at all on coarse gold, because it's too slow a process. I believe amalgamation was used somewhere in the Cord Mill but not extensively. It might have been used as an amalgamation trap somewhere.

Gravity concentration was used more when the desired mineral is relatively course. Because it is heavier than the gangue mineral, it is retrieved by panning or the use of shaking tables or sluice boxes. Panning is the principle that's used in the concentration processes.

In a rake classifier the coarse material sinks to the bottom and is gradually raked out of the bottom of the lower part of the classifier and goes back to the mill for regrinding. Combine that with a larger bowl (such as eight, ten, twelve feet in diameter) at the lower end of this rake classifier, whereby you have a pulp with finer solids. A bowl classifier is something like a thickener, whereby there are rakes at the bottom that move very slowly, and as the heavy particles sink to the bottom, these rakes pull them into a central spot where a pump pumps the slurry to some other part of the mill. The principle is to remove the coarser particles that may require finer grinding and get them back to the grinding mill.

I was particularly impressed by S. Power Warren's idea of transferring sands from one tank to another, and thereby increasing the possibility of better gold recovery. It was absolutely an innovation: I don't know of it being done before or after that. I was impressed by Mr. Warren's knowledge of the metallurgical industry.

Another thing I appreciated about the Cord Mill is their system of pumps. All the pumps were in the same place; it was very easy to get at them and

very well designed—planned. He was the one who designed it. He came up with the idea. You could see his knowledge in the design of this mill.

Sunshine Mine's Shrink-Stope System

We had some time off, of course, and my friend Gerry Hartley and I would go out and look around the area. We were very much interested in visiting the volcano cinder cone that appears in practically all the pictures of that area.

We also visited the Sunshine Mine and went underground there to see what they were doing. They were using a shrink-stope system, which is very common. But the young man who was the mining engineer there was trained at Boston, one of the big schools in the East, and he wanted to show us this unique system. We were surprised to find that it was nothing but the common, old, shrink system, which was used all over the state of Nevada. He was a graduate from MIT, which is a very astute engineering school, but if you want to learn mining, you better go to one of the western schools, because you're right in the vicinity of mining. [laughter] You're in the area, and you're more apt to get people that really know something about mining.

The shrink system is very simple. It's where you're working in the stope, you blast the ore down, and the bottom of the stope is attached to a chute, where you draw the ore out. You draw up just the right amount of ore so that the men can still work in the stope. They're standing on the ore with their equipment to drill the ore above them. When they blast, why, then more ore is drawn out to give enough space for men to get back in there again and do more drilling and blasting.

There was no exploration going on in that area at the time, and the only mining operation that was going on was the Mary Mine and the Sunshine. I don't know about the Chiatovich Mill, if the mill was actually operating then.



"We were very much interested in visiting the volcano cinder cone that appears in practically all the pictures of that area." (Photograph courtesy of the Nevada Historical Society.)

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#### Living Conditions

They had some tent houses set up there by the mill along the road which is right on a ridge, and the tent houses were on the north side of this more or less east-west ridge. They were very simple and very common in those days. They had a wood foundation and wood floor and housed one or two men to a tent. Gerry Hartley and I roomed together, and we worked together. We must have had our meals at a boardinghouse right there. I know we didn't have to go any distance at all. It was all in walking distance. It was not up at the mine, because I have never actually been at the Mary Mine.

When a man finished a shift, he was somewhat dirty, and it was necessary for him to clean up. Now at the Mary Mine itself, there were shower facilities for the men working underground. A man is filthy when he comes out from underground. And when he's working in the mill, sometimes he's working rather strenuously—if they have a spill, and he has to do a lot of shoveling or something like that. When you're underground the conditions are relatively warm, and it could be snowing outside. It's quite important for a man to have a hot shower and sort of rehabilitate himself before he goes out. At the mill, the showers were in the mill. At the mine they had what they call a change house, where you change from your grubby, underground clothes to your street clothes and take a shower in between. And, of course, they just took their shower and didn't have to go very far to where they lived. They used outhouses, and if you wanted water in your tent, you carried it.

I had my own vehicle there, a 1936 Pontiac. [laughter] We made six dollars a shift in 1939. And in the mine they would have been earning about the same. That was pretty fair wages, because I remember my sister-in-law who was a registered nurse said, "Well, that's pretty good. That's what I make." That included the room in the tent house. My wife was living in Reno, and on long breaks I would come to Reno. My income from the mill was our principal income, actually. She was working, but I was earning more than she was by far.

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Notes

1. Zeier, 10.

2. Stimler and Vollmar were said to be related and may have collaborated on some work. Ford, Bob Douglass oral history, 17.

3. Nevada Mining Record, 6 June 1931.

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4. WCRM, 3-36 to 3-37.

# 122 5. Ford, Leon Hill oral history, 55.

The Mills 6. It is possible that the names Vollmar Mill (flotation) and Black Mammoth Mill (cyanide) were used interchangeably. Leon reported that he knew both mills under the Black Mammoth name. Bob Douglass said he helped build "Vollmar's Mill." However, Douglass must have worked on the Black Mammoth Mill, because he reported graduating from high school in 1933. By then the Vollmar Mill had been in operation for several years. Perhaps the confusion between legal and popular names resulted from the fact that Vollmar was involved in so many operations that it was simpler to refer to all of them as either Vollmar's or the Black Mammoth.

7. Shamberger, 73.

8. Shamberger, 80.

9. Ford, Leon Hill oral history, 55.

10. More likely the Black Mammoth Mill, the one hundred-ton cyanide mill. There is a discrepancy in dates. Douglass thought this was the smaller Vollmar Mill, but if he graduated in 1933, the smaller mill was already built, so he must have worked on the larger Black Mammoth Mill, which would have been constructed in 1937 according to Leon Hill, who remembers working with Douglass. As noted earlier, the confusion between legal and popular names may have resulted from the fact that Vollmar was involved in so many operations that it was simpler to refer to all of them as either Vollmar's or the Black Mammoth.

11. Wages were more likely \$4 per day based on records from the 1930s.

12. George Wingfield had twelve banks in Nevada that were closed in 1932. Russell R. Elliott, *History of Nevada* (Lincoln and London: University of Nebraska Press, 1973), 285-289.

13. Shamberger, 80-81.

14. WCRM, 3-37

15. Black Mammoth leased all of the properties from the Pittsburg group, and it was through Vollmar's financial maneuvering that those properties were eventually leased to Cord. This came about through a person with ties to both Vollmar Jr. and Cord—Basil Prescott, Cord's personal engineer and a consulting engineer to Black Mammoth. Prescott owned the Prescott lease from the Black Mammoth Company, and it appears that this lease was transferred to Cord. Shamberger, 80.

While the men worked around the clock in a growing variety of jobs, a family town with more women and children developed in Silver Peak. Leisure hours found them enjoying picnics and potluck dinners on the playa, arranging progressive dinners with neighbors, playing softball and baseball games, and swimming in the reservoir. Community-wide activities such as these tightened the bonds between family and friends. In fact, some families intermarried and joined together in business ventures, further investing in Silver Peak's survival.

The population grew to 655 in 1940 with a friendly mixture of Serbs, Native Americans, one Mexican, and other ethnic groups:

They all seemed to be friends every day but Saturday night . . . when the fights started, and that didn't have anything to do with nationality . . . . They also had a colored family there, a fellow by the name of Johnson. He was a very nice fellow. He did odd jobs around there—shined shoes and stuff like that. He had a family. I didn't have brains enough to be biased. I don't think anybody else around there did. We figured they were just people.<sup>1</sup>

In the era before television, children made their own fun. Adults who spent their childhood in Silver Peak reported feeling a sense of freedom that helped them develop confidence and independence while still being secure in a small community where everyone looked out for each other's welfare.

By 1938 the town had a high school. According to its yearbook there was also a beauty shop, dairy, cafe with air-conditioning, and a baseball field. The old railroad bed became the road leading from Silver Peak to Tonopah, Hawthorne, and Bishop. Automobiles and radios linked Silver Peak with the outside world. As historian Steven Mehls said, Silver Peak was isolated but not insulated.<sup>2</sup>

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Gathering at the swimming hole. In the water, *left to right*, Bob Godfrey, Bob Chiatovich, Leon Hill, and an unidentified man. (Photograph courtesy of Leon Hill.)

The following oral history interviews trace the town's progress from a mining camp to a family town, complete with stores, schools, recreation, and entertainment. Along the way a few infamous incidents stretched into Silver Peak legends.

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#### BOB DOUGLASS: LIFE OF A SINGLE MAN

Bob Douglass lived in a one-bedroom, adobe building with a carpenter during the months it took to build Vollmar's Mill. He remembered drinking, dancing, and fighting when he wasn't working.

I'd say the population of Silver Peak was maybe five, six hundred. This was in the 1930s, but it was booming out there. These places [like Silver Peak] were the only payrolls around. It was a good job for us. Somehow we never had any money, but we had a lot of fun.

I lived across the street next to the Smith brothers' store in a one-bedroom, adobe place with Eddie Johnson, a carpenter on the job. To me he was an old man. I think he was about sixty years old. But he used to worry himself to death about my safety, because I was just a kid, and I'd be tripping and falling over the banisters and everything else. It was hard to find a place to stay in Silver Peak. We paid, I think, sixty dollars a month for the two of us.

Right across the street was the boardinghouse owned by Perry White and Mrs. Brown. And they lived together, but Mrs. Brown ran the restaurant and Perry White ran the bar. He also used to have a mail run between Tonopah and Manhattan. They had to be a jack-of-all-trades, you know. There must have been about twenty-five or thirty of us kids that were building that mill. She always used to make lemonade in giant washtubs, and we would come in and drink three or four tubs of lemonade. [laughter] A meal would cost about fifty cents. I know the drinks in the bars cost us fifteen cents. There were no parades and celebrations, not until after I left, and then they used to have a lot of them.

#### Dancing, Drinking, and Fighting

My brother Jack Douglass had jukeboxes in Silver Peak. He had a Model T Ford and three or four jukeboxes. There were two brothers down here, and they were bootlegging out in Sparks. Louie Benetti was a brother of Angelo Benetti, and Angelo Benetti got in the slot machine business. Louie thought, "Well, I can get into it, too," but Louie couldn't hardly laugh in English. [laughter] So he got a hold of Jack, and they started the Nevada Novelty Company, and they went from there. Jack had all of the southern Nevada route—slot machines, jukeboxes, and everything else in there.

Everything was on the cuff down there. The bar was on the cuff. If you wanted to go in the bar and get a drink, old Perry just marked it down, so when Vollmar came along with the paycheck, there was nothing left. We just spent it all down there.

There was nothing else to do out there. We could have a dance. We'd get the schoolteacher and the Shirley girls . . . There were three Shirley girls: Virginia married Harvey Humphrey, Ethel married Hank Gilbert, and there was Jane Shirley. Well, the Shirley girls worked for Ma Brown along with her daughter. The Chiatovich girl and three or four different girls were around there, too. There were twenty of us kids, and we'd go in that bar where my brother had a jukebox, and we'd have a dance galore.

Oh, we'd have our fights all the time. If we couldn't get along, we'd go out there and fight. You'd get beat up, or somebody ought to beat you up. What the hell is the difference? You didn't care. You shook hands and went on with the dance. Nobody threw us in jail for anything. If they threw us in jail, we'd still be there. [laughter] I was just a young kid, but I was involved in the fights. All of us were involved with them.

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#### MERLE SWANSON: ALWAYS WILLING TO HELP

When Merle Swanson arrived, Silver Peak was a town changing from a roughand-tumble mining camp to a more civilized family town. It was an exciting time of hard work punctuated by wild events.

I kind of liked Silver Peak when I first went there in 1936 or 1937. I didn't know how quick I'd get to work. We had a pickup and stuff to make a camp, so I said to my wife, "Where would be a good place to go?" because you could park about anywhere.

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Silver Peak in 1938. Buildings and locations as follows: 1, Main Street; 2, Stanley Chiatovich's house; 3 and 4, Fitzgerald's; 5, S. Lewis's; 6 and 7, Fitzgerald's; 8, Palace Bar; 9, Shirley's hall; 10, Gilbert's; 11, Northern Supply; 12, Schoolhouse; 13, Teacher's home; 14, Sommers's; 15, Post Office; 16, Beauty parlor; 17, Stark's saloon; 18, Woitishek Lumber Co.; 19, Black Mammoth company house; 20, Vollmar home; 21, Black Mammoth company office; 22, Fayette Hill's; 23, Kenneth Hill's; 24, Mrs. Shirley's; 25, Butcher shop; 26, Louis Shirley's; 27, Silver Peak Club; 28, Cameron's; 29, Phil Bissonnette's; 30, Hospital; 31, Black Mammoth Cafe; 32, Swimming pool; 33, Ball diamond; 34 and 35, Unidentified. (Photograph courtesy of Barbara Dodgion.)

She said, "Oh, I'd like to be down there where that big tree is."

There were four or five guys there, and I said, "You guys got this ground here?"

They said, "We got squatter's rights. We own this lot."

So I asked, "How much will it take for you guys to move off?"

They said a quart of whiskey. [laughter] I went and got the quart of whiskey. Later on we built a house there on that property, which was down where the store used to be. [laughter] Then we moved that house up to Hawthorne when the mines closed down in 1942.

## Drinking and Fighting

One night these two guys got in a fight, and one took a knife, and he cut the other guy's stomach open. Another fellow, Swanburg, was watching and ran down to his house as fast as he could. He didn't have time to explain to his wife what happened, but he grabbed the bed sheet and ran back up. They wrapped the guy in it, and they took him to the nearest doctor in Tonopah. His wife thought he'd gone crazy. When Swanburg came back, his wife and daughter had moved out of the house. He was pretty well liquored up, and he started throwing things out of the house. [laughter] He threw a bucket of water right through a trailer house parked nearby. The next morning I said to the trailer owner, "Why didn't you hit him and stop that?"

He said, "Merle, I couldn't. He was weaving too much." [laughter] But they saved the guy's life by wrapping him in that bed sheet.

## **Businesses in Silver Peak**

We had quite a few businesses there in Silver Peak. The one quality store was Hank Gilbert's, and we had a couple of restaurants. We weren't short of bars: there must have been at least five or six. They had the one post office. It's still up there. There were a couple of grocery stores right close to Hank Gilbert's clothing store.

We also had a salesman there who sold Plymouth and Dodge cars. In fact, I bought my first new car in Silver Peak from that salesman back when the first 1939s come out. I give \$950 for it. That was a real good little car. It would go seventy miles an hour in second gear.

I always enjoyed Silver Peak while I was here. My wife liked Silver Peak, too, and she made friends there. It was different from other towns. The people were much more friendly than they are in most places. They were raised to help you. I remember one winter after we had the house built, we saw this tent on fire. We ran up there, and this little girl, about five months old, she even had ice in her hair, and that tent was ruined. So we brought them down to our place, my wife and I, and we made beds all over the floors. So then I put the husband, Merril Thompson, to work.

The people in Silver Peak were always willing to help you, and we were always together. One would suggest something and then talk it over with the others, and pretty soon we'd all be doing something, like when we moved that school building into town. Time went by pretty fast, and we all enjoyed one another.

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## LEON HILL: FUN AND TOWN LEGENDS

Leon Hill did not attend school in Silver Peak, but he spent much of his childhood and youth there. The Hill family lived between Silver Peak and Goldfield during the 1930s. His oral history reveals a time when people relied on each other and created their own fun. He and his family played an instrumental role in changing Silver Peak from a mostly male mining town to a family-oriented community. Town legends reflect the growing sense of community formed during this time. 127

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#### **Commuting for School**

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Community Life Our family had a house and lived in Goldfield where we could attend school. My dad worked in Silver Peak and came back and forth, and the family went to Silver Peak to be with him on weekends . . . . Grandpa [Oscar] Hill lived in a house in Silver Peak, which he had built half underground like a sod house, and it looked like these igloos out at the depot in Hawthorne. He had a garage on top of the ground adjoining it for his old Model T Ford. A stairway went from the garage down into the house. He lived back up next to the hills, and he was the only one who lived up there, not too far from the cemetery. His mine was out in back of his house. He used to go up there and dig, make a few feet, then go home and rest. He may have gotten something out of it in the early days. I asked, "Is there any gold in it?"

He said, "Sure, but there's too much rock." [laughter]

#### Family Life

My father [Fayette Hill, superintendent of the Black Mammoth Mill] was very involved in the family and was the most good-natured man, yet he was strict. We always had dinner together up until the time we got big enough to leave home. You could hear him laugh all over town, and everybody enjoyed him. He was always turning the hose on somebody or some darn thing. Not at work: he didn't joke around at work, but he had a real playful side. Like sometimes my sister Gerry didn't want to get up when he called her in the morning. In the summertime she'd sleep out on the screened porch because it was cooler. So he'd just dump a bucket of water out the window on her head! [laughter] My dad always was so humorous in a lot of ways, and he enjoyed everything. He didn't drink at all. He didn't even drink coffee or tea, nor did he smoke. [laughter] He just liked people.

He'd be out playing ball and taking care of his family, but if somebody had something that was broken, they wouldn't hesitate to take it to my dad. He'd always fixed it, and there was never a charge. For example, my wife's folks had a washing machine sitting outside. Around Silver Peak there's a lot of dirt blowing with no grass to hold it down. The washer was one of these old types with an agitator inside and a wringer on top. The sand that blew into the machine had worked a hole in the pulley, which was made out of pot metal. Her dad said, "I can't get a pulley like this. Do you think your dad could weld this?"

You can't weld pot metal or it will explode, but I took it up to Dad anyway, and he said, "I'll make a new one." So he went down to the dump, found an old piece of iron, stuck it in a lathe, and made one. When I took it down to Wilma's dad, he wouldn't believe that Dad hadn't bought that somewhere. But that's the sort of thing people did. It wasn't only my dad.

# Vacation by Automobile

When you worked seven days a week (and back in those days you did that a lot), you got paid for seven days a week. If you got five dollars a day, you got that every day. They let you off on Christmas and the Fourth of July, but you were docked. Sometimes you'd get lucky and get three days a year off with Thanksgiving. You didn't get holiday pay, and you didn't have any sick leave either. As mill superintendent my dad always got a good vacation. His was a month off. The people who worked at the mines, most of them only got a week. Those who worked at the mill, I think they got one week after a year, and after about five years they got a couple of weeks.

During summer vacation we all went with Dad on a trip. We would generally go to San Francisco, because my mother's mother and her sister were there. We liked to go down there, because we liked to go on the beach. Sometimes we'd go by way of Yosemite, and sometimes we'd go by Donner. We always had a car, back when a lot of people were still using horses, because my dad could fix anything. We had an Oakland, and we had several Franklins (those were air cooled, didn't have a radiator), and we had an old Studebaker and a Star. This was really something to see! There were eight of us kids . . . . And on all the fenders and running boards we piled beds, clothes, et cetera. You had a cloth top, so you didn't put anything up there, but on



Leon Hill on vacation in San Francisco. (Photograph courtesy of Gerry Cooper.)

the back you often had what we called a trunk rack, where you could tie stuff. Then in the back seat—these cars were long and there was quite a space between the front and the back seat—they put the grub sacks and grub boxes and the cooking utensils.

# Early Childhood Deaths

Two members of our family died at a young age. My sister Mary died when she was probably ten. She got pneumonia and passed away in 1937, which was after I was married. My oldest brother, Fayette Jr., died when he was twenty-three. He got peritonitis. Out at Silver Peak he lifted an ore car and strained himself, or thought it was just a strain, so he took a physic, and then it got worse. He finally went to 129

Tonopah, because there wasn't any doctor in Silver Peak. Dr. Craig over in Tonopah operated on him, but by that time he had peritonitis. It spread all through his body.

# Community Life

If Fayette hadn't taken a physic . . . but back in those days that was the thing: it was castor oil or Epsom salts, a laxative. We relied on home remedies a lot. Every spring we had to take sulfur and molasses. It was supposed to thin our blood, and we had to take it, too. Boy, I hated that! I stepped on a nail once and put peroxide on it. I didn't even know there was such a thing as a tetanus shot.

# Saturday Night Dances

No matter what, there was a Saturday night dance. Everybody went. The saloons were the only places with enough space, so it was either at one saloon or the other. They had one over at Shirley's and another over at Perry White's. Sometimes we had live music, otherwise it was a jukebox.

Miners were a very independent lot. They were pretty proud, too. They played hard, and they worked hard. I don't know why they worked so hard for their money, because they just threw it away. They'd buy drinks for the whole bar. They didn't even know who was in there half the time. That's why they were always broke.

Things would be going along, and people would be happy, and then somebody'd walk up to someone else with a pair of scissors. He'd reach up and say, "Do you want this tie?" And he'd cut it off and hand it to him. Pretty soon somebody'd come by, and he'd grab him by the collar and jerk his shirt off, and, oh, the next thing you know everybody was fighting. They didn't even know who they were fighting half the time, so one guy would



"They had one [dance] over at Shirley's and one over at Perry White's." Shirley's bar in Silver Peak, owned by John Shirley (background left with white shirt and dark tie) and Anna Shirley (to the left of the woman in the flowered dress.) (Photograph courtesy of Sherry Mattei.)

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turn around and slug the guy next to him, and away they would go. Most everybody had a little bloody nose or a little ache here and there the next day.

#### **Organized Sports**

In 1938 Silver Peak had a women's softball team that won the state championship. That was softball, so they had ten players, and that took about every available woman in Silver Peak. [laughter] Of course, most of them were young. The older ones didn't want to get involved with all those practices, because they had a husband to cook for and children—they had to take care of their wifely duties. My sister Gerry was seventeen, and she played on the team. I believe Dorothy Winifrey was about thirteen or fourteen. My wife was about twenty. And Olive . . . I thought she was elderly, but she was probably in her late twenties or early thirties. [laughter] At that time I was only about twenty-one. She was the oldest one. Oh, and Kathleen Spaethe. She married Jimmy Morris later, after he was divorced and she was out of high school, but just barely. So basically they were a high school team.

Oh, they had a heck of a team! Their coach, Walt Lyle, he was a real tough coach. He worked for the power company. And he kept their nose to the grindstone. They played after they got off work or whenever they could do it. They played the towns around like Tonopah, Battle Mountain, Round Mountain—places that weren't too far away. That team became state champions. They went to Reno, and the mayor<sup>3</sup> introduced them on the radio and had an award for them.

nd had an award for them.

The men also had a softball team, a baseball team, and basketball teams, but these we made up ourselves. We're just a bunch of guys who got together that liked to play. We didn't have coaches or anything like that. If somebody around Goldfield or Tonopah or Manhattan had a team, we'd go play ball with them. We had no gym, so we were forced to play at the town of the challenging team. We played regularly, but it was very unorganized in that you never knew who was going to play-whoever wasn't on a shift at that time when we



The 1938 state champion Silver Peak softball team. Back row, left to right: Unidentified, Rosie Lano, unidentified, Coach Walt Lyle, Gerry Cooper, Olive ?, Kathy Spaethe. Front row, left to right: Unidentified, Wilma Hill, Joanne Hall, unidentified. (Photograph courtesy of Leon Hill.)

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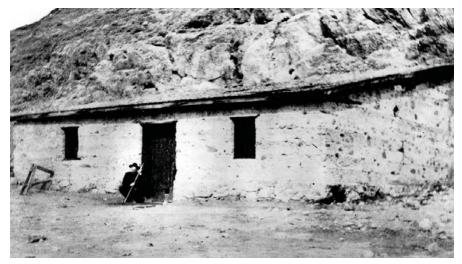
were playing. [laughter] The mill ran twenty-four hours a day, and some of the time the mines would operate sixteen hours a day, so shift work really affected sports, but it didn't stop us. It's surprising how old some of the guys were. We had guys playing who were probably forty-five, fifty. Back then I thought they were ancient.

Silver Peak was a real community deal. We played backyard (or sandlot) baseball at night out on the flats, and pretty soon everybody in town was out there. Everybody knew everyone, and they'd bring whatever they had to eat. They would share, and, heck, sometimes I don't think there were a half dozen people left in town. We played both softball and baseball. Men, women, boys, girls—you'd be surprised at the people who'd be playing at some of those games. Like my dad might be on second base, and my sister might be the catcher [laughter].

#### Recreation

In summer, swimming either in the reservoir or out in the big hole in the playa was a necessity. When people came home from work, generally speaking, that's what they would do to clean up. They'd go down there, take soap with them and a bath towel, scrub up, and take a swim . . . Although some people made their own showers at home. What they would do is put a barrel or something on the roof, hoist the water up, and dump it in this thing. Then the sun would heat it during the day, and when they came home at night they could take a shower.

The ones that used the reservoir for bathing generally would go into that stone building that's still there. It was a jail later. It was open and had a dirt floor. A lot of times there'd be horses in there, but the horses didn't care if you changed your clothes in front of them. [laughter] If there were no



"The ones that used the reservoir for bathing generally would go into that stone building that's still there." (Photograph courtesy of the Nevada Historical Society.)

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women around, the young guys would go in the water without swimming suits. I did. We'd a lot rather do that, because it's easier to take a bath without a bathing suit on. [laughter]

Most of the swimming was at the reservoir, because the swimming hole out in the playa was salty. Sometimes when we had organized ball games out there, the backstop itself was not very far from there. It would get real hot, so people would wear a bathing suit, and they'd go jump in the pool and cool off once in a while. The players didn't do that: the spectators got to do that.

In the wintertime we could skate or ski. There was a lake at Silver Peak from the overflow of the reservoir that would usually freeze hard enough in the winter to skate on. The lake was only about three feet deep at the deepest. We would build a fire of wood and old truck tires on the edge of the lake and have a great skating rink and a lot of fun.

There was a lot of snow on the mountains in the wintertime, because the mountains were pretty high. In fact, we made a lot of our own skis. We learned how to make them one time when Goldfield was snowed in for twenty-six days during a bad winter. One snowplow was coming from Tonopah and one from Goldfield with cars following them, and they would meet, and then each snow plow would turn around and go back. That way the cars could get from one place to the other. But when the wind was blowing so hard all the time (evidently we were in part of a blizzard, I think that was 1932), that hole would keep filling up.

A fellow from Minnesota was stranded in Goldfield while his car was in the shop getting worked on, but he had to get back to his business. So in that same shop (it was a blacksmith's shop, too), he made himself a pair of skis and took off.... While he was making his skis, I was watching him, because I was real interested in what he was doing. He made himself a pair of poles, too. He got a couple of sticks, and he smoothed them up, and then got a couple of kid's wheels that they had on a toy car or on their little wagons, and he put those wheels on there.

What you do to make skis is take about a one-by-four or a one-by-six, and then you trim it down the way you want it with the pointed toe. You'd put that end of it in boiling water and leave it in this hot water for hours, and then you could bend up the tip. Then you put it on a board. They had a way of bracing it and hooking it up there until it dried, and it would dry that way. Then you'd groove it and wax it. We didn't have clamps for your shoes like they had later. All we had was a toe strap that you slid your foot into. Sometimes you'd lose that. We tried to avoid jumps as much as possible, although sometimes you'd go where there was a cut in the side of the hill, and you'd take off. If you were lucky, you landed straight up and nothing would hurt you. Mostly you landed down. We weren't very proficient.

And he put a real wax job on the skis. He ironed it in. He used the type of iron that you heat on a stove like my mom used . . . . You could take the wooden handle off one flat iron and hook it onto another one. A clamp would hold it by snapping it in there.

Another winter activity was sledding. It's a wonder somebody didn't lose a leg, because we took galvanized iron, which comes in sheets about three feet wide and eight feet long, and we would turn it up a little bit on the end so it wouldn't catch in the snow and put a cable through there. Then we'd tie it behind Nobby Pergrossi's car, and he'd tow us around town, and we'd ride on that sucker. If the guy in front were to fall off, with the weight of the back people sitting on there, that could have sawed his leg off. Later we started using a ladder, because people who had better sense than we did kept hollering at us until we finally quit using the galvanized iron. [laughter]

To use a ladder, we had to make the front runners... so you can saw each leg on a forty-five degree angle. The ladder acted as our runners. Still, a lot of times that front end would stick into the snow. We tried to stay on the roadway, because that way the snow was packed, but sometimes when he'd turn the car around or something, then it'd get into a snow bank and throw all that snow all over! [laughter] The roads would be kind of like ruts. If you came down that middle, boy, you had the deeper snow coming up on the backside of you; you got pretty cold. [laughter] We just sat on it, but what we'd usually do is put a blanket or something down there to try to keep some of the snow off. You had to improvise. We didn't have anything else. [laughter]

Most kids rode burros for fun, too. Early in the life of mining, they moved the ore with burros. Even in the deep mines, like over in Goldfield, they'd put the burros down a shaft, and then they'd have carts down there, and the burros would pull carts back and forth from the face to the skip. That was before they had the power trams to pull the ore cars. There were a lot of burros around that became available to the kids when the miners took out



Sledding on a ladder. *Left to right:* Leon Hill, Bob Godfrey, George Muller, and Jack Chiatovich. The Black Mammoth Mill is in the background. (Photograph courtesy of Leon Hill.)

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[left town]. They just turned their burros loose, and people claimed them. Sometimes the mines would sell them to kids.

When I was just a little guy, probably seven or eight, I had one named Beauty. He wasn't a beauty by any means. I only paid two dollars for him, but I cleaned a lot of yards and stuff to get that two bucks. I thought that was the greatest burro! On the Fourth of July they'd have burro races and horse races for kids and adults. That's how they made their fun, and I'd pretty near always win the speed contest and the bucking contest. [laughter] All you had to do was to put your feet in his flanks, and, boy, he'd buck. [laughter]

#### Radio and Newspapers

There were radios in a lot of the cars, and we had radios in our house after I was married. (This was way before TV in our part of the country.) You couldn't get any reception in the daytime at all, but at night you could get the strong stations like KCL radio and some of those big power stations like Salt Lake City and San Francisco and Los Angeles. Those had strong signals, but just at night, and that's how we got the national news. The first radio we had was one that had earphones on it, a crystal set. You got a lot of squeaking and squawking. At Christmastime my brother was working someplace, and he bought a Philco-one of those old, table models that was about one to three feet high, rounded at the top. Then later on when we got radio stations in Fallon, you could start picking up a little bit during the daytime sometimes. They say that one of the reasons reception was so bad at Silver Peak was because there was so much metal in that area that it interfered with the radio waves. The radio didn't change how we spent our free time, because you didn't get very good reception. At night you'd get the Fibber McGee and Molly show, but if people had something else to do, they didn't let radio interfere with it.

We didn't get a lot of news, but we had a Goldfield paper and a Tonopah paper. The Goldfield paper you got once a week, and the Tonopah paper . . . , you had to go to Tonopah and get it. I think maybe that's one of the reasons why we didn't know the bad things that happened in the world, because nobody ever told us! [laughter]

#### Famous Schoolhouse Episode

One Halloween night I heard all this excitement, and when I went up to see what's going on, I saw the schoolhouse come through town on Jimmy Morris's big flatbed truck. Dad raised the power lines. Stanley Chiatovich sat up on top of the house and rang the bell all the way down the street. [laughter] Well, you'd have to know something was going on in a little town like that! 135

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"One Halloween night. . . I saw the schoolhouse come through town on Jimmy Morris's big flatbed truck. . . . People were accustomed to moving houses." Frank and Fayette Hill using Frank's trucks to move buildings. (Photograph courtesy of Gerry Cooper.)

The school had been placed four miles outside of Silver Peak, because it had to be forty miles away from Goldfield, or else Silver Peak couldn't have its own school. Otherwise, children from Silver Peak would have to go to Goldfield and Tonopah.

People were accustomed to moving houses. More than half the houses in Silver Peak were probably moved from Goldfield or Tonopah or Rhyolite or someplace. When they moved to an-

other mine, it was a lot cheaper to take their home along. This schoolhouse wasn't very big. It was a one-room schoolhouse, so they just drove up there and jacked it up a little bit, put some barrels under it, and let it down. It was just a light house, and so it didn't take anything to jack it up, and they just backed the truck under it, let it down on the truck, and away they went.

I know that Howard Haskin was there and Roy Cleary, Stanley Chiatovich, and another one. I think one of the Shirleys was there—probably Ernie, because they had a kid in school. They were probably getting tired of hauling the kids out of town four miles to go to school every day. Then, every day they had to go get them after school.

Afterwards, all the county commissioners got a little upset, so they had a hearing. [laughter] Tom Whyte was the justice of the peace for Silver Peak. He found everybody guilty of disturbing the peace and charged them a buck. And so, the schoolhouse stayed.

#### The Max Baer-Ed Murphy Fight

When I was twenty-one or twenty-two (Wilma and I were married then), we had a seat right in the front row for the Max Baer-Ed Murphy fight in 1938 or 1939. Everybody in town went, and some of the people from Tonopah and Goldfield came out to watch. Of course, Ed Murphy was a Tonopah boy, and Max Baer was a world-famous fighter. He was a world champ once, and then he got to playing around, and he lost it. In the Stockton-Sacramento area where he fought, he used to go to the bar there and make bets that he could knock out a mule or a bull with one blow, and he did. He won a lot of bets that way, they say. He was a powerful hitter.

Baer agreed to come to Silver Peak and fight for a thousand bucks. He was going to take it easy on Murphy. They went along sparring each other, and I really think that Murphy got the idea that he might be able to lick Baer. So he smacked him one, and I think it was reflex action with Max Baer. A lot of people said he hit him with a left, and some people said he hit him with a right, but I'm positive he hit him with both! Baer hit Murphy with a left and set him up, and then hit him with that right, and he went down, whop! Just like that! His head was turned, and I was sitting where I looked right in his eyes. I thought he was dead and, by golly, so did Max Baer. They started to count. They got to about five, and Baer said, "For God's sake, stop counting! Find a doctor!"

They got a doctor, and they got him up. He was still out though, and I heard afterwards that he didn't remember a thing that happened after he got hit until about a day and a half later. He moved around, he did things, he talked to people, but he said he couldn't remember a thing. Well, if you can knock a bull out . . . I've seen bulls shot with a twenty-five caliber pistol right up close. They don't even bat an eye! [laughter] So Baer had to have a powerful punch.

I don't think he meant to hit him that hard. I think there had been an agreement that Baer would be fighting a hometown boy and would take it easy. That's what Freddy Fields said afterwards. Freddy was the one who promoted this thing, too. He's the one who pushed Murphy. Well, Murphy was good at fighting with local people. I think that they planned on a good show for the public. I wasn't aware of any betting. You'd have a hard time getting a bet. I know I sure wouldn't have bet against Baer. [laughter] But maybe some of the local Tonopah people might have bet on Murphy.

#### Crater on Fire

A long time ago Jim Cleary had the finest team of horses in the country. He was always kind of scared of things. Well, a story came out about how that crater outside of Silver Peak was one of the last to become extinct. Then Vollmar and Ernie Shirley and some of those other old-timers, they went out, and they hauled in a bunch of wood and some gas and some rubber and some green things. They built a fire in the cone of that crater. [laughter] When that smoke came up, and Jim Cleary saw that, he got his team, and he took off for Fish Lake Valley. [laughter] They said he liked to run that team to death, because he thought that volcano was ready to blow up.

#### **Casey Sisters**

Another thing we did to amuse ourselves when a new person or somebody we didn't know came into town, they had what they called the Casey sisters trick. There were two fictitious girls, the Casey sisters, and they were very attractive girls, and it was real nice to have a date with them if you could. But their father was a mean old son-of-a-gun, and so people didn't dare go out there when he was there. He happened to be gone on this particular night, so this guy from Silver Peak would ask a new fellow, "Since 137

you're my buddy, and you're new here, I'll take you along and introduce you." A lot of times they would take a box of candy or something.

They would get out there, and they would knock on the door, and the fellow that was the guide, he'd holler, "Hey Susie, everything OK?" It's dark outside, and it's dark inside the house, except they'd have a candle burning in the back. About that time the door would open, and a guy'd jump out with a shotgun. "So you're the so-and-so who's been fooling around with my girl." He hauls off and shoots that shotgun in the air, and you'd be surprised how fast people can travel. [laughter] Scare off the newcomer.

I was there one night when this happened. This guy came out there, and he's a big fat fellow, and he didn't have much hips. He was wearing one of these old straw hats they used to have, the hard-rib type and hard crown. He was all dressed up, and he had this hat on, and he had a box of candy in one hand and a bottle of booze in the other. When they shot at him he took off. Well, he was afraid he was going to lose his pants, so he dropped the candy, and he held on to his belt. Then he was afraid he was going to lose his hat, so he dropped the bottle and held on to his hat with his other hand. [laughter] He went across the tailings pond which was by my folks' house or just below it. There was a burro laying there, and he stumbled over the burro and went down. He claimed afterwards that he stumbled over a jackrabbit instead of a burro, so from then on his name was Jackrabbit Kelly.

#### SARAH GRABLE: THE MOUNT FAMILY

One unique experience for children from a big city was to spend summer vacation in Silver Peak visiting grandparents, much as today's children head off to summer

camps. Lloyd and Martha Mount operated a dairy in Silver Peak, and three of their grandchildren related a variety of experiences, all with the common thread of great freedom and great fun. Sarah Grable is the daughter of Ward Mount and first cousin to Keith Mount and Nancy Adams. Sarah lived in Silver Peak for a short time as a child. In her oral history she gave detailed information on her family's background, along with descriptions of her grandparents and of the Silver Peak grammar school.



Sarah Grable. (Photograph by Victoria Ford.)

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#### Family Background

I was born August 4, 1936, in Pasadena, California. Both Mother and Dad were living in Silver Peak, but my maternal grandparents objected to their first grandchild and their only daughter's child being born in such a horrible place. My grandfather would look at this horrible desert and the cows and the dirt and the bugs and think, "You can't raise a child there, and there's not adequate schooling." My mother had been a classical musician, and they were concerned that I was being deprived of those things.

The Mounts were out of Kentucky. Great-grandfather Mount (I believe his name was Fletcher) was a U.S. Marshal and was sent to Utah to clean up the Mormon bigamy at the turn of the century. Fletcher's son, my Grandfather Lloyd, met Martha (my grandmother) there. Her parents had come from Scotland, and they were good Mormons. He fell in love with Grandma, which was considered wrong, because his father was out there to clean up the bigamy. She, of course, left her family and the Mormon area and went off to follow her husband to the mining fields.<sup>4</sup>

My dad, Ward Fletcher Mount, was born in Ely. He went to California because his paternal grandfather had a trucking firm that contracted to install the light standards in Los Angeles. Very lucrative. That's where he met Mother. Dad went to private schools. He drove a La Salle or an Auburn or one of those snazzy automobiles . . . and this was Depression time. He was well-to-do, plus his parents were making good money.

For Grandfather Lloyd, it was the glory of finding the gold. He had an old Ford truck called, "Dynamite." It was painted red and had big, hard tires. He had a grub box. If you were lucky enough you could go with him and the dog and look for gold. It was just an exciting thing to do, and he would always come back with gold hunks. And there were some pretty big hunks at times—the size of the tip of my little finger.

Oh, he was an expert. In 1957, 1958, 1959, he went to the university, and they would give him students to take with him mining. He hadn't attended the School of Mines at the University of Nevada. He picked up his knowledge through experience. It was love. Even in his seventies he would get in that truck and go, and Grandmother would worry, but everybody felt that the dog would come home if anything happened to him.

I know the Mounts were mining in that area . . . . The Mounts were not people who worked for anybody. They ran their own businesses like the dairy. Grandfather was always involved in politics wherever he went through the union-type activity, which seemed strange because they were so independent in contracting. But they were very much Democrats in their thinking. In Mineral County, Grandfather was elected to the Nevada State Legislature in the early 1950s. Keith Mount, Nancy's dad, was also in state legislature. And they were in Lions Club—always active, always community minded.



"The Mounts were not people who worked for anybody. They ran their own businesses like the dairy." Ward Mount at the dairy in 1942. (Photograph courtesy of Sarah Grable.)

#### Home in Silver Peak

When I grew up, it was always called "The Peak." I remember my grandmother's house as big, but I look at the pictures, and it was very, very small. It was rectangular. There was the living room, and then directly behind that was the kitchen. It was partially concealed, so you couldn't see the sink—partitioned off so you wouldn't be looking at dirty dishes when you came in the front door. And there was one bedroom and an indoor bathroom. My parents' house and my grandparents' house were kind of L-shaped and there wasn't a huge distance between these two: they were very close neighbors.

Horses came to the back door to eat. There was a Dutch-type door, a double door slit in the middle. You could open just the top half or the bottom half, or you could connect them and open them both. And we'd open the top half for ventilation, and the horses would come there, and you could feed them carrots. I don't think they were wild: they were gentle, or they had been broken.

Out front there was a tree stump. I don't remember a tree there, so the tree stump had to have been hauled in. And Grandmother would chop the chickens' heads off with her little ax. In addition to raising chickens, the dairy was there. They milked the cows. In the corral were four feeding stations and then six places in the back where they milk them. They would have walked the cows in head first. There were a lot of cows around, and they weren't always in the pen, because I was allowed to feed the babies, and so the mother cows were confined.

They were milking by hand. I milked a lot of cows but never got any milk. [laughter] I couldn't figure out how to do that. Grandfather or Dad would come by and squirt milk in my mouth for me. They told me, "Don't stand behind a cow, because they could kick." But if you were in the front, you weren't in any danger from the cow.

Children weren't considered a bother. I don't ever remember being run off or frightened. I could run in the desert. I could pick up lizards, tarantulas. I knew what a scorpion was and to stay away from them, but I've never been afraid of scorpions. I was taught never to reach on top of the rocks. Snakes get out there to warm themselves. The rattlers are above there, so don't ever reach overhead where you can't see what's laying there. And that was not fear, it was just, "Be smart. Don't go doing dumb things because there are rattlesnakes." My parents and grandparents taught survival skills. But that was the miner in my grandfather. He's out there wandering through the rocks, and you certainly wouldn't want to worry about a child doing something stupid.

# Silver Peak School

I went to school at the Silver Peak School, and I started school too young. Now, there was no kindergarten at that time. I believe it was first through sixth grade. I was the only child that was so young (I think four), so they figured, well, why doesn't she just go to school for the companionship.

It was a scary place. I did like it, but I was scared. There were two buildings, and between the two buildings, as I remember, there was an outhouse. And the big boys would tell me if I went in there that they would either throw me in or I would fall down the hole. And I was scared to death, terror-

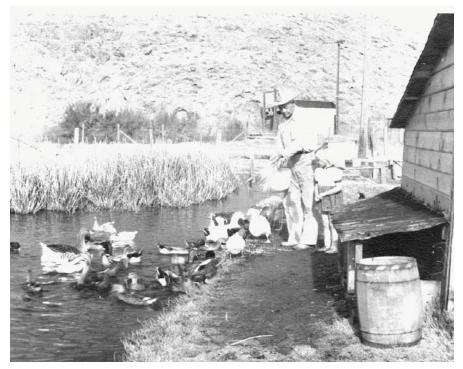


Sarah with her maternal grandmother and her parents at her parents' home in Silver Peak, 1932. (Photograph courtesy of Sarah Grable.)

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Lloyd Mount with granddaughter Sarah at the reservoir. (Photograph courtesy of Sarah Grable.)

ized by the big boys. I think I just was scared all the time. At one point, I don't know if they had threatened me or they were behind me walking to school, or if I was walking home. I can remember running like a son of a gun and falling over a clump of rocks and opening up both knees. I took skin off. I was just pouring blood. Grandmother used her cure for everything. She used pure lanolin on my skinned knees, which stinks unbelievably, and she would put Lysol in the pure lanolin. I'm sure just the soap and water that washed it to begin with would have hurt more than the lanolin.

I was scared of the teacher, Mrs. or Miss Chiatovich, not because she was vicious or mean or ugly. I was just very young and wanted to play. The teacher would stand up front, and you were not to look at the blackboards when it wasn't your class time to look. Apparently, you did your board work, and then you had your desk work. There were three boards, and somehow those boards would slide around behind each other so only one was visible with schoolwork on it. It seems we were divided into three groups. If it wasn't your turn to have board work, she would hit you with this long pointer that she used. (This is what I remember, and I wonder if it was really like that.)

We had inkwells, and I was left-handed. We had the wooden pens that you put your own points in. We had songs that we sang. We sang "ABCD." We did phonics. You sound it out. And I don't remember anybody ever getting reprimanded for sounding out . . . . If you sounded it out right and you sounded all the letters, that was good even though you didn't get to the word. The books . . . . I know it wasn't *Dick and Jane*, because I went into a California school for a couple of months, and they had *Dick and Jane*, and I had not had it. It was strange, because it was very big words and very big pictures. So maybe we had the [Mc]Guffey Reader.<sup>5</sup>

There must have been a PTA or its equivalent, and they would have plays and all sort of activities. One event where the blackbirds were baked in a pie . . . , "Old King Cole was a merry old soul," we acted those out. I was one of the blackbirds in the pie, and we all got down on the floor, and they cut the pie, and all the blackbirds flew out. That was very exciting, because I think that was probably one of the few times I had real group activities.

Nobody had ever been strict with me. I was never hit. I was never told "no." I was never reprimanded, abusively, anyway. I was told, "That wasn't proper. You mustn't do that. Ladies don't do this. Why don't you think before you make that choice, not just because somebody else is doing it. You figure out whether you should do it." So I was disciplined in an entirely different way. My dad never tolerated anyone being hit. My mother was the same way—very gentle. If they raised their voice, you stopped, because you knew there was something like a car was coming.

Well, I was not protected from ordinary things. But Grandmother Mount said, "Ladies do not go in bars. Ladies do not drink. Ladies do not smoke. Ladies do not use curse words. Ladies get up every morning and comb their hair, brush their teeth, and present a very good picture to the world." But the way Nance and her two brothers grew up was entirely different from me—different children, different parents, and the grandparents were the only tie.

I remember going down the mining chute [like a slide], and I didn't dare get caught to begin with because I wasn't supposed to be there. And you couldn't go up because there were splinters. There was a metal divider that I guess allowed only smaller rocks through, and if you didn't lay down quick, you could cut your head off, or so I believed. So you had to come down quick and lay down to get under this. Very dangerous. Absolutely off limits. But cousin Nancy was two years older than I am, so she was a big kid, and when she was around I would go down the slide.

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# **KEITH MOUNT: RIDING, HUNTING AND FISHING**

Keith Mount, born in 1926 in Los Angeles, is also the grandson of Lloyd and Martha Lawson Mount. As a child Keith lived in Silver Peak with his family (his father Keith, mother Mabel, brother Bob, and sister Nancy) while his father mined. As a teenager he continued visiting his grandparents during the summers to help with the dairy. After the morning and evening chores were finished, Keith and his 143

brother caught burros or wild mustangs and roamed the countryside hunting and fishing, activities which developed into lifetime hobbies. At the time of his oral history interview, Keith was retired, living in Bridgeport, California, and working part-time as a fishing guide.

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Keith Mount. (Photograph by Victoria Ford.)

#### The Mount Dairy

My Grandfather Lloyd kept the pump down at the pond that pumped the water up to the Mary Mine. When we were going there in the summers, we used to ride the pipeline on horses and checked for leaks. Brother and I would do that. My grandfather was not a mechanic, but he kept the electric pump operating. I remember the electric lines coming over and going into the pump shed.

We also had a dairy later. They had five or six cows. We had to milk some of them every day. The dairy consisted of the corrals where the cows were kept and then a milk shed where the milk was taken and processed. Basically, it was dumped from the buckets into a Coca-Cola cooler, a chesttype cooler that kept the milk circulating and cold. It was approximately three feet by two feet and probably eighteen, twenty inches deep. It had folding doors on the top. The theory of the cooler was that it circulated cold water and kept the Cokes cool. They just put the milk in there instead of water and let it circulate which kept the milk cool, so it was not anything that was sanitary. We did wash it out when it was empty. The milk was raw milk, and we would bottle it, but first you skimmed off three or four inches of cream at the top of the bottles, so that you could sell cream. We delivered the bottles of milk around town. We weren't old enough to get a driver's license, but we did drive. It was the same as in any old mining town . . . . As soon as you learned to drive, why, you drove whether you were ten years old or what. There wasn't anything unusual about that. The sheriff in town never bothered anybody. We didn't do anything reckless. We were just basically doing it out of necessity. We had a 1932 or 1933 Ford pickup, and that's what we drove out to the junction. We drove there all the time, but my grandfather rode with us. The butter and cheese and other dairy products were brought there, and we had to go out to where the highway met the highway from Coaldale. I think there was a railroad stop out there where we picked up the stuff. They would drop it off probably once a week and leave it

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in big bags that were insulated with ice. We also used to go to Bishop in the pickup to get hay for the cows, and we drove over there once a month.

We had chores to do. Chores included feeding the cows and milking the cows. It didn't take very long—six cows, morning and night. If I were to guess, it probably wouldn't take over an hour or two hours in the morning and the same at night to do it. When we weren't doing that, why, we were kind of on our own. The inducement to come up in the summers (somewhere in 1937, 1938, 1939) and help in the dairy was that you would get a saddle horse to ride.

# Horses and Burros

Nellie Coughlin, the lady that ran the power station, was an old witch. Any time the kids came around, she was out there with a broom chasing them off. Next to the powerhouse there was a fenced field. She had a jenny in that field, and it was just as mean as she was, because you couldn't go through the field without getting chased off.

Out in the area behind the power station was that salt-grass flats, and there were a lot of wild burros that ran out there. We used to go out and catch the burros and ride them. The burros were very smart—if you carried a rope, you never got close to them. But if you carried a little stick of hay, you could get right up to them, close enough to where we could get a hold of the mane and jump on. To steer the burro we'd take a piece of bailing wire and wrap it about a foot long so that it was kind of a switch. If you wanted to

go to the left, you'd hit them on the right side and they'd turn to the left. And we'd ride them until they'd bucked us off, and then we'd go get another one and do the same thing. Supposedly, they belonged to this Nellie Coughlin, and when she caught us out there, we'd be in trouble.

Perry White owned corrals about fifteen miles out of town. He owned a bar downtown, too. And when my brother and I had our horses, a number of times Perry would give us a nickel to go round up his horses. They would be out where the burros were eating, out



"Supposedly, [the burros] belonged to this Nellie Coughlin, and when she caught us out there, we'd be in trouble." (Photograph courtesy of Sherry Mattei.)

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in the salt marshes. Granddad made a deal with Perry White. We went up there and trapped these wild horses and brought them back to town. At Granddad's dairy, we put them in the corral with the cows, and Granddad broke the horses for us the first time. My grandfather was an old cowboy, so he knew what to do. At the end of the summers we'd turn the horses loose. In the wintertime they reverted to the wild, of course, and when we caught them again the next spring or the next summer, we had to basically top them off—they're a little green when you get them back, and they want to buck, so you have to kind of start from scratch again. We'd let them run around the corral for a day with a sack of wheat in the saddle. Then we took the saddles off, and we rode them bareback almost all the time. We only had one saddle between us.

In order to trap the horses each summertime, we had to go back out to the corrals, which was about fifteen, twenty miles out of town. And my dad would take us up there. We had to stay at the corrals. They had a shack up there at the corrals, but the shack had a lot of snakes in it, so we didn't stay in the shed. We'd go down to the corral and sleep where the hay was kept. Now mind you, we were probably somewhere between ten and fourteen years old. They'd take us up there to the corrals, and then Dad would go back to town, and they would come back about four days later and pick us up. They left us with enough food and stuff for the three or four days that we were up there.

The corral was rigged so that the spring fed into a trough right in the middle of the corral, and that's where the horses watered all of the time. That's why they came there: they all had to come at some time or another, because it was the only spring. When they'd come in at night, you had a wire you could pull, and that would close the gate. Then you'd wake in the morning and find out if your horses were there. If they weren't, why you'd turn those horses loose and wait until the next night. Sometimes in the middle of the night, you'd catch two or three bunches of them.

But we got brave a couple of times. At least one time I decided to ride a couple of the horses that weren't ours. I got on one of the horses, and he came out of the chute bucking. It bucked me off almost immediately. And, fortunately, instead of landing crossways on the trough, I landed longways in the trough. If I had landed across it, then I probably would have broke something, and we would have been up there for another two or three days without anybody to help. When we told my dad about it, he was kind of mad, because he could see what the consequences would have been.

#### Recreation

I remember hunting in the marshes across the road from where we lived. The first time I went hunting over there, I borrowed a shotgun from the guy that lived up at the mill, kind of across the road from the house. It was a 10gauge, double-barrel shotgun. I was just a young boy. The first time I shot it,

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it knocked me down. There was a telephone pole across the street, very close to the ditch that came out of the pool and went down into the marshes. That was where my brother and I practiced with our .22. We would stick a penny in a crack in a telephone pole, and then walk back and shoot at the penny. We had to learn to shoot like that, because Granddad wouldn't let us shoot the birds in the body. We had to shoot their heads off, because if you shot them in the body with a .22, why, you didn't have anything left. And we didn't get very much ammunition, because they couldn't afford a lot of it. It was a necessity, that's all. You just learned to do it and to do it right.

The marsh was full of game birds. My granddad was designated the game warden there. Game warden wasn't like the job it is today. You didn't sit there with a book. All he did was just to make sure that somebody didn't come in and kill a hundred ducks. Almost everybody hunted whenever they wanted to. When we went deer hunting, why, the first thing you did when you got to camp was kill a fawn. That was camp meat. Actually, we came across the state line (although we didn't know exactly where it was), and we hunted and fished over in this area near Bridgeport. We wandered all the way from Battle Mountain to over here. Granddad was a great fisherman. He loved to fish, so every time he'd get a chance to get away, we would hop in his pickup truck and throw the camp box in there and go fishing and hunting. I remember fishing and duck hunting in Fish Lake Valley with Bob Chiatovich.

They were all happy years. I don't remember any of my younger years being unhappy years. I just don't remember having any problems. Although I knew there were problems—financial problems—for our family from the Depression years, we always had something to eat.



# NANCY ADAMS: TOTAL FREEDOM

As the youngest sister to Keith Mount, Nancy Adams was exempt from dairy chores during summer visits with her grandparents in Silver Peak. In her oral history she related her experience of total freedom—an unusual thing for a young girl in the late 1930s and early 1940s and a sharp contrast to her life in Los Angeles during the winters.

I was born in Los Angeles in 1932 and spent a lot of my time in Silver Peak, probably in first,



Nancy Adams. (Photograph by Victoria Ford.)

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second, and third grade—around that time. My grandparents [Lloyd and Martha Mount] moved to Silver Peak because the Mary Mine was opened, and there were jobs there. And my grandfather worked for the Mary Mine, and as far as I can remember, he was working on the tailings (whatever that was) and taking care of this little pond of water that was next to their house.

He also ran a dairy. He had a herd of cows. The dairy was against a small rise, and two of the walls of the dairy were dug out from that rock. And then there were wooden railings for the other two fences of the dairy. There was a very small shack, and the cows were let out at night onto the salt flats to roam and would be gathered in every morning to be milked. My brothers' job in the summertime was to milk those cows. They would try to teach me how to do it, but evidently I was too young to manipulate my hands the right way, because I couldn't do it.

My grandparents would sell the milk. They would not process it: it was raw milk put into milk bottles and sold to other people who lived in Silver Peak.

#### Summers at Grandparents'

My parents would drive right up after school after Memorial Day, deposit us there, and leave us until Labor Day while they went off for their summer vacation. I stayed with my grandmother and grandfather in their house which was probably twenty by sixteen. On one wall there was a Murphy bed that was taken out of the wall and let down every night. That's where my grandmother taught me how to say my prayers, in bed next to her. On



"The dairy was against a small rise, and two of the walls of the dairy were dug out from that rock." Lloyd Mount at the dairy in 1942. (Photograph courtesy of Sarah Grable.)

one wall was a kitchen. There was a sink and a stove, and there must have been an icebox. Other than that, it was a one-room building, and outside was a bathroom in a little shack.

#### **Riding Horses**

The corral near to the house was just across the road that came from Coaldale Junction. Every summer my brothers captured wild mustangs for themselves and broke them. That was their transportation. My grandfather told me I couldn't have my own horse until I learned to get up on it by myself. We had a bridle only, so I had to grab this horse's mane, shinny up it's leg, and get on the horse. That way I was allowed to ride it by myself. The horses were named Joker and Ace, and they never lost their wildness. They would see a clothesline full of clothes, and they would jump and turn and run under it to try and get us off of their backs. We would be very good at learning to duck every time we'd see a clothesline, because they would not stop. They were very hard to control.

The horses had a mind of their own, and they didn't like to leave the corral. So you'd have to prod them and push them and kick them in the sides to make them leave the corral to ride out onto the salt flats. But the minute you turned around to go home again, the horse took the lead. I was such a little girl, I had no strength to hold the horse back, and that horse would just run for that corral and would not stop till it got right to the gate. And then it would stop on a dime, and I would invariably fly over its head, hit the gate, and fall to the ground. And that was my way of getting off the horse for the longest time. [laughter]

One time my grandmother sent us to the store (the Northern) which was a block away. My brother'd put me on the back of the horse, and we trotted up there. When we got off he said, "I want you to stay outside and watch Ace, and I'll go in and get the groceries. And do not touch this horse!"

Well, when he left the wind came up, and everything's blowing through the air, and the horse was very skitterish. So I reached up to pet its nose, and it scared him. He reared back, snapped the two-by-four in half that he was tied to, which held up the overhang on the store, and it collapsed. People were running in all different directions. And my brother came out in a cloud of dust and was so angry at me that he made me walk home behind him and the horse and didn't ever want me to ever get on his horse again. [laughter]

#### Learning to Swim

We used to go swimming at the old swimming hole which was out on the salt flat. I couldn't swim, so my grandmother decided to teach me how, but she didn't know how to swim. So she put a dog harness on me and tied a rope to it, and she walked around the edge of this swimming hole while I learned how to dog paddle. At the end of the summer when my parents

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"We used to go swimming at the old swimming hole which was out on the salt flat." (Photograph courtesy of the Nevada Historical Society.)

came back, the big event was that I jumped off of the edge and into this bottomless pit, and I could swim across it. It was so exciting. It was called the bottomless pit because the story was that someone had pushed an old car into the pit and no one had ever been able to dive deep enough to see or find that car.

# **Total Freedom**

There was an old mill across the road. It was already closed at that time, or maybe it was just shut down for the time being. It seemed to me like the size of a roller coaster, it was so huge. And we'd climb every single inch of that mill—these old iron beams all over the place with these cars that came and went. We would pretend that it all worked. It was great, great fun.

We were allowed to go wherever we wanted to go. We did have to either ride the horses or drive [due to the distance] to the volcano—an ash cone outside of town. The view from the Coaldale Junction highway was this perfectly round cone, but the back of it had been blown out, so you could walk into the cone. And on the edge of the mountain were these little claims where the rocks would be built up. And inside the rocks would be a tin tobacco can with the claim information on it.

Every Labor Day they had a huge parade, and I was in the parade. A man named Harry Stimler and his wife were friends of my grandparents, and one time he left his felt hat at their house. Grandmother cut it up and made Indian moccasins out of it, and dressed me up like Little Beaver. And she took a burned cork and did my face all dark and put on these Indian clothes for me. I took Ace, the wild mustang, and they put a rope around his nose and up one side of the horse and put me on that horse bareback, and I won. And when I went up to the stand, people were cheering and clapping, and it scared the horse which started to rear up. I was holding onto its mane to keep from sliding off the back end, and everyone thought that was part of the act, so they cheered louder and louder. I was so scared I was going to fall off! And finally, my dad came up and rescued me and took me off the horse.

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Silver Peak made such an impression on me, I believe, because of the contrast to the wintertime when we were living in suburban Los Angeles. We went from living in the big city to this total freedom where no one worried about you in any way, shape, or form. We did whatever we wanted to do. I'm sure that there were dangers in Silver Peak, too, that no one thought about. [laughter]

I think the reason why that part of my life's so important to me is because that made me what I am now. Women were boxed in, in those days. But that freedom gave me the opportunity to think in a different way and to make decisions I may not have been able to make had I not had that experience. I never had the feeling that there was something I couldn't do because I was a woman. It never occurred to me. And my father and my mother were very traditional people, so I don't believe it came directly from them. I believe it came from that experience of being with my brothers and doing what they did and having the freedom to do all those things. I think that's the experience that made it different for me than it did for many people in my generation.

I didn't realize it at the time. I just assumed every child had a horse. My husband was from the East, and when we went to Philadelphia I would relate these stories, and people would look at me like, "This lady is lying. Nobody does those things." And that's when I realized I'd had a unique experience—that it was different than most people. And had I not had that opportunity to spend my summers in Silver Peak . . . how much I would have missed!

Notes

1. Ford, Leon Hill oral history, 69.

2. WCRM, 3-39, 3-41.

3. Mayor John A. Cooper.

4. Sarah noted that Martha remained friends with her family, similar to any child marrying outside of the family's religion. Sarah Grable, personal conversation, 1997.

5. The McGuffey Reader series (sometimes known as McGuffey's Eclectic Readers) was developed for use in schools and was first published in 1836 by the firm of Truman and Smith in Cincinnati, Ohio. FirstSearch, OCLC, OCLC 43019835.

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# 7 The Families

Chiatovich, Shirley, Humphrey, Hill—these names are still well known in the Silver Peak-Goldfield-Tonopah area, and some have become recognized around the state. Several families formed the nucleus that helped Silver Peak survive beyond the boom and bust of gold discoveries and marketprice fluctuations. In addition, families intermarried creating a complex web of relationships. Descendants happily recalled the heyday of the late 1930s. While Vollmar hustled investors, those at home in Silver Peak reveled in this time of easy money—a party time for all.

Often mentioned in both community and mining activities were three men—Stanley Chiatovich, Ernie Shirley, and Harvey Humphrey. Along with oral history comments from family members, the following brief biographies sketch their active lives.

# CHIATOVICH, SHIRLEY, AND HUMPHREY

#### Stanley Martin Chiatovich, 1910-1960

Stanley Chiatovich was born to Martin and Nellie Cleary Chiatovich in Silver Peak. Stanley's mother died in 1920, when he was a boy of nine, leaving him the oldest boy in the family. He attended elementary school in Silver Peak and high school in Tonopah. Later he worked independently in the operation of mines and in leasing and prospecting around Silver Peak for years.

He married Frances Hill, daughter of Frank and Lillian R. Houser Hill on February 2, 1934. Stanley and Frances had three daughters—Janice, Barbara, and Jaculine. The family moved to Gabbs in 1950.

Stanley had been a member of the Elks Lodge and the Lions Club in Silver Peak. He died of complications from Valley Fever in 1960.<sup>1</sup>

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# Ernest Jesse Shirley 1901-1959

Born September 5, 1901, to John and Anna Cleary Shirley, Ernie Shirley was active in mining at Silver Peak most of his life. He owned and operated the Mohawk silver mine, one of the Argentite group, which he had discovered when he was sixteen. He was a leaser and superintendent at the Mary Mine for twenty-seven years and was also superintendent of the Black Mammoth Mine.

Ernie was married to Ruby Grice on August 5, 1933, in Goldfield. Ruby had one son from a former marriage, Don Schriber.

Ernie served as Esmeralda County Commissioner for



Ernie Shirley and Stanley Chiatovich. (Photograph courtesy of Barbara Dodgion.)

twelve years and also worked for the Nevada-California Power Company. He died of silicosis on December 24, 1959.<sup>2</sup>

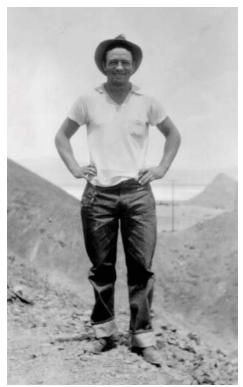
# Harvey R. Humphrey, 1905-1986

(by Sue Humphrey Thompson)

Harvey Humphrey was born in Carson City on October 17, 1905, to Charles and Ella Mae Thorne Humphrey. His uncle, John Humphrey, discovered gold at what became Manhattan, Nevada, and the family soon moved to Manhattan where Harvey grew up with three older brothers and two younger sisters in a mining camp environment. Harvey went to elementary school in Manhattan and worked summers as a cowboy and at putting up hay on the nearby Monitor Valley ranches. As there was no high school in Manhattan, he attended high school in Tonopah where he lived with his aunt, Lida Humphrey Gilbert.

In high school he met Virginia Shirley, a native of Silver Peak and daughter of John and Anna Cleary Shirley. They were parents of one daughter, Sue Ann.

The initial years after their marriage were tough ones in Nevada. For a living, Harvey dealt cards, tended bar, labored on Boulder Dam, and worked in mines and for the electric power company. They moved where the work



Harvey Humphrey in 1937. (Photograph courtesy of Leon Hill.)

was. After a few years, Harvey and Virginia moved to Silver Peak where Harvey initially worked for his father-in-law. They never left.

Over the years, Harvey became owner and operator of a range cattle operation and developed numerous mining interests. He was an excellent horseman and was a unique source of information on springs and water resources in the area and on the running of cattle in the arid Clayton Valley. He was sought out for his knowledge of the Silver Peak Mining District by those who were interested in past mining operations or the possibility of new ones.

Harvey served Esmeralda County for nine years as a state legislator, first as an assemblyman from 1958 though 1962, and then as a senator from 1963

through 1966. He was chairman of the Assembly Committee on Mines and Mining for three legislative sessions.

After Virginia died in 1973, Harvey lived on alone in Silver Peak for thirteen years until his death on August 21, 1986. During that time he was continually active in town projects, successful in having Silver Peak platted as a town and in creating Silver Lake as an evening retreat for townspeople. He maintained a supply of gasoline and a pump to help townspeople who were otherwise fifty miles from the nearest gas station. Locals as well as strangers stopped by for advice or information, and he was happy to help. Harvey loved the outdoors and spent many days prospecting in the Silver Peak mountain range.

Harvey lived a Nevada life to the fullest. He grew up in the boom and bust of a mining camp. He breathed the air of the high country hayfields and creeks, chased mustangs on horseback, played basketball on the high school team, and raised Cain with his brothers to the ire of a strict mother. He had seen workers at his side slip to their death at Boulder Dam. He had spent long days in the saddle herding cattle and long nights sleeping on the ground. He drilled wells, developed springs, and experimented with cattle breeds suited to the Nevada desert. He had his own cattle outfit. He had watched gambling grow, from the view of a dealer to that of being one of the seventeen state senators managing that growth. He had prospected, picked, dyna-

mited, and mucked in the mines and breathed the rock-dust air. He became a successful mine owner and chairman of the State Assembly Committee on Mines and Mining. He was a good and useful citizen of his town until the day he died. He was a son of Nevada and a part of Nevada.<sup>3</sup>

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# WORLD WAR II

The good times ended abruptly with the United States entry into World War II. War Order L-208 shut down nearly all gold mining operations throughout the country.<sup>4</sup> The impact on Silver Peak was dramatic. Tramp miners moved away to find jobs, leaving behind the heart of the town—the families. Even some of those left the area in search of work, but most were drawn back to their hometown where they designed a survival plan to keep them going until the war ended and demand for gold returned. One solution was a family-owned corporation. The Chiatoviches, Shirleys, and Humphreys together operated several essential businesses. Everyone worked, including wives who had previously stayed at home to raise children. Thus, the party town returned to a survival mode.



# GERRY COOPER: TOWN'S FIRST WEDDING

Gerry (Hill) Cooper, daughter of Fayette and Geraldine and sister to Leon Hill, was born in Goldfield, Nevada, September 26, 1920. Her memories occasionally differ from her brother's, which is not unusual, but they both remember their father's legendary mechanical expertise and the fun they had as children creating their own



Gerry Cooper. (Photograph by Victoria Ford.)

entertainment. Gerry is still proud to have been the bride in the town's first wedding ceremony, after which everyone turned out to shivaree the newlyweds.

# Childhood in Silver Peak

I really enjoyed my childhood growing up in Silver Peak. Everybody was like one big family, and it seemed like everybody took care of everybody else. For example, my mother never swam a stroke, but if kids wanted to go swimming, the parents trusted my mother to take every kid in town down swimming even though she couldn't swim. They had that much confidence in her—that's the type of a town it was. People just loved each other and trusted each other.

A lot of my memories would have been during the 1930s when I was growing up. That was a good time in terms of the mining and milling business. There were jobs. There were stores, and there was quite a bit going on in Silver Peak. The town didn't start to really go downhill until about the time I graduated from high school.

The very first thing I remember was living in the tent that one summer. Actually, it was one of these tents that had the board sides that came up about two or three feet and had the hardwood floor. It was a one-room tent, and it had a stove, a bed, and a table. The folks slept inside, and we slept on cots on the hill.

We had homes in both Goldfield and Silver Peak. The one in Silver Peak was the mill home. It belonged to the Black Mammoth Mill and was available for people who needed housing, not just the superintendent. It was just down from the mill and was very good sized. There was a living room and a kitchen-dining room combination with a big dining table. Then there was another room built in the back where the girls slept and only one bedroom. There was no bathroom. We had outhouses, but we did have running water and a wood stove.

In later years, my parents purchased the Minken's house below that. The Minken house was a nicer home. It had a screened front porch, a living room, and a kitchen-dining room, and it had two bedrooms with a bathroom between, so it was more modern.

My mother's name was Geraldine Houser. She stayed at home and raised eight of us children. I have three brothers older than I, and I am the oldest of

five girls. Our family has double cousins. My father [Fayette] and Frances Hill's father [Frank] were brothers. My mother [Geraldine] and Frances's mother [Lillian] were sisters, and brothers married sisters, so our bloodline on both sides is the same as if it was my father and mother. Frances was always more like a sister to me than a cousin. She was five and a half years older than I, and when I was a teenager growing up, she had just gotten married to Stan Chiatovich not too long before that, and she just kind of tucked me under her wing and took care of me.

My Grandfather Oscar Hill was in Silver Peak. We called him Daddy Hill. Ellen Geraldine Houser Hill. (Photo-He lived in a little cabin down from the graph courtesy of Gerry Cooper.)



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mill with his mine behind it. Mom used to make pies for him, and I used to take the goodies over to him. If he wasn't home then I'd go up to the tunnel and call to him. Then he and I would go back to where it was nice and cool and sit there and visit.

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# Medical Care and Family Deaths

The only time I missed school in twelve years was when my sister died with double pneumonia and my brother died with a ruptured appendix. In those days they had good family doctors who came right to your house. Before Mary died, the doctor came and put those mustard plasters on her, and she tore that off.

And then my brother, Fayette, he was pushing an ore car and felt something give, and he had a ruptured appendix. They rushed him to Tonopah to



Fayette Hill, oldest son of mill superintendent Fayette Hill, showing off his drilling championship cup at the University of Nevada in 1935. He was a freshman majoring in mining engineering when he died. (Photograph courtesy of Leon Hill.)

Dr. Craig, who was a wonderful doctor. Also, Fred Vollmar had a doctor, a specialist, fly in from Los Angeles. He checked my brother and said that Dr. Craig had done a wonderful job taking care of Fayette, but peritonitis had set in. It wasn't that there wasn't medical help, it was more a matter of lack of antibiotics, because today they could have saved somebody with pneumonia (I've had pneumonia four times), and they could have saved somebody with a ruptured appendix.

These were really tragic losses—my sister at twelve and then my brother when he was twenty-three. I lost my sister when I was fourteen and my brother when I was sixteen. Mary was just two years younger than me. We were very close, and that was a very hard loss. She was so pretty and had such a lovely personality. There was a funeral. They were both buried in



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"Mary was just two years younger than me." The Hill children and a friend in Goldfield in 1925. Back row, left to right: Elwood, friend Albert Bradshaw, Fayette. Front row, left to right: Gerry, Mary, and Leon. (Photograph courtesy of Gerry Cooper.)

Goldfield. In fact my mother, my father, my grandfather, my aunt, my sister Lois, my Uncle Frank, my sister Mary, and my brother Fayette are all buried there in Goldfield in a family plot . . . . I missed a week of school when my sister passed away and a week when my brother passed away.

#### School and Public Services

My dad was a firm believer in education. He said it didn't take much to get to school on time, and you better get a good grade in deportment. He said if you didn't get the good grades in the rest, it was because you had trouble learning, but you better be behaved. [laughter] That was a very firm ruling in our family. With my folks, manners were really taught to us from the time we were little. There was always the "excuse me" and "yes, please." And when an older person came in, you got up and gave him a chair.

We went to school in Goldfield five days a week, Monday through Friday. My father would come in on Friday night, pick us up, and we'd go to Silver Peak to spend the weekend. Early Monday morning (I mean *early* Monday morning), and that was before you had heaters in the car, we heated bricks in the oven of the wood stove, wrapped them, and we covered up 160

The Families with quilts, and then he'd drive us to Goldfield in time to go to school. In twelve years of traveling—Friday night out to Silver Peak, Monday back to school—I never missed a day, and I was never late in twelve years. By the time my younger sisters were ready for school there was a school in Silver Peak.

Because of the transportation back and forth, when I wanted to play basketball, my brother Fayette would let my brother Leon use the car to take me out to the basketball games, and I did earn my letter in basketball. But that's the way we did. When you went to the doctor, you went to Tonopah. When you did your banking, you went to Tonopah to the First National Bank. When women had their babies, we took a mad dash to Tonopah. Several children were born at Millers, just outside Tonopah about fifteen miles, because they couldn't quite make it to Tonopah. The Tonopah hospital where my daughters were born has been moved to Coaldale, and it's now the bar and restaurant.

The Smith brothers had a grocery store and soda fountain by the picture show in Silver Peak, and they also had the post office in that building. We did buy some of our clothing from Hank Gilbert, who had the dry goods store down by the Smith brothers, and then up where Mrs. Shirley lived, there was a store in there. But Mom bought most of our clothing and food in Tonopah.

## Jackrabbit Minister

A lot of these mining towns did not have a minister or churches. Reverend Shriver was a traveling minister who came into Silver Peak once a month to give church services in the schoolhouse. He lived in Carson City, and he was referred to as the "jackrabbit minister." But some of the women of the different communities got together, and they would have a Sunday school every Sunday at the schoolhouse in Silver Peak, so the children of the town would get the religious training they needed. My mother acted as a superintendent of the Sunday school. In fact, I taught Sunday school when I was twelve years old to the real little ones. The schoolhouse was like a community center in Silver Peak.

#### Queen of the Ball

We all did things together and just made our own fun . . . Every Saturday night there was a dance at a bar by Virginia Humphrey's house, and we danced all night. There was a bar with another building connected to it that was the dance hall. I don't remember Mom and Dad dancing very much. Everyone used to take the kids along, lay a quilt underneath the bench, and put their little ones down to sleep. About midnight they'd stop and have what they called their midnight lunch—cakes and sandwiches—and then they'd dance some more. When I was a teenager growing up, my dad always made me come home at midnight, because he thought a good girl didn't stay out after midnight. The only time I stayed out later was for the Valentine's Dance in Fish Lake Valley when I was about fourteen. We went to the Molini Ranch, where they had a Valentine Dance with a queen of the ball [competition]. The miners from Silver Peak and the ranchers from Fish Lake Valley were competing at a penny a vote for the queen. The miners kept saying, "Oh, I got five dollars in my pocket. I got ten dollars." The ranchers backed out, and I ended up being queen of the dance that night. I didn't intend to put the miners in that position.

First Wedding by First JP

The first time I saw Carl Cooper was when I was back in junior high school in Goldfield. He was out of high school, because he was nine years older and was working on the railroad. He was playing ball, and when the umpire called something, he was so mad. I said to my girlfriend, "Wow, he's terrible. I don't like that guy." We were taught you didn't yell.

Later on I went to work at the picture show in Silver Peak. He came out from Tonopah with the projectors. The projector did not stay there all week. They carried it back and forth from Tonopah. The movie theater had seats and a screen and was located right next to the store. The way the movie house was arranged, I was selling tickets right here, and the projector door was right there. So I'd look over, and I'd think "Oh, that's a good-looking guy." I'd look up, and he'd be watching me.

We were the first couple married in Silver Peak, and we were married in my cousin Frances's house in the front room. It was a very, very small wedding with just family there. Carl's brothers stood up with him, and my sisterin-law Wilma, Leon's wife, stood up with me. That was April 22, 1940, and the lilacs were in bloom in Candelaria at the time, so Frances had lilacs all over the place.

Tommy Whyte, who was Silver Peak's first justice of the peace, married us, and he had to go to Tonopah to find out how to do that, so my dad took him. Well, my dad had just bought a new Lincoln Zephyr at that time. All of us women talked Daddy into seeing how fast it could go. Later on that year they had what they called a kangaroo court to raise money for the Christmas party for the children. When they had kangaroo courts, they always charged the men, but they never did charge the women. Well, that year Tommy Whyte called Mom and Wilma [and my sister-in-law Dorthella] and me out there, and he charged us for backseat driving from that trip to Tonopah. [laughter] It was fun. We had a good time.

They always held a shivaree for newlyweds. The people of the town came to your house, and they furnished drinks and some snacks, and they just spent the evening having a good time . . . They hooked up a hay wagon on the back of a car, and they put Carl and me on the wagon and drove us all

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over town blowing their horns. At that time Mr. Barlow was the sheriff, so he took his handcuffs and put one on me and one on Carl, so everywhere Carl went, I had to follow him for a short while that night. [laughter]

After that . . . we went to the dance, and we danced all night. Every time Carl and I would go out on the dance floor, they'd play "Here Comes the Bride." I was young, and I was so bashful. I know my face was red all night. About five o'clock in the morning, half of them went home with us, and I can remember fixing ham and eggs for everybody at breakfast.

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#### JANICE JOHNSON: PARTY TOWN

When Janice Chiatovich Johnson arrived on the scene in 1936, her parents, Stanley Chiatovich and Frances Hill Chiatovich, were busy "swinging socialites," and they were not alone. Many of their closest relatives were also Silver Peak residents, and as a child Janice remembers Silver Peak as a party town where progressive dinners and baseball games brought balance to the hazardous work miners faced each day. In her oral history Janice describes a joyful childhood, although at times her family's history included problems. Through all her memories runs a sense of nostalgia—for a time of great fun, when airplanes were a source of wonder and every day was a mystery unfolding. The recent discovery of her mother's diary after Frances died added greatly to Janice's insight about Silver Peak in the 1930s.

I was born Janice Gaye Chiatovich, the first of three daughters to Stanley and Frances (Hill) Chiatovich in Tonopah, Nevada. My sisters were Barbara Faye and Jaci Rae-rhyming names, which is quite adorable. I lived in Silver Peak until I was twelve and consider myself a native; however, my dad was a true native, born in Silver Peak. We moved to Gabbs in 1950, so with the exception of one year, Silver Peak was a town of my family. For that one year in 1942, all the family men had to pick up and go where there was work, because World War II shut down the mines. And so we,



"I was born Janice Gaye Chiatovich. . . . My sisters were Barbara Faye and Jaci Rae." Left to right: Jaci, Janice, and Barbara Chiatovich with kittens. (Photograph courtesy of Barbara Dodgion.)

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along with several of my cousins' families, moved to Reno for a year. And then we all moseyed back as fast as we could when the guys decided to go mining on their own.

There were usually about thirty-two, thirty-three people in Silver Peak who were all uncles, cousins, et cetera. They were a very, very exciting bunch. (There was an occasional unrelated outsider.) My playmates, of course, were my cousins. All of the fun happened when I was a child. Poor Barbie and Jaci, when they came along four and six years later, the mining business was depressed, and the fun really pretty much came to a screeching halt with the advent of World War II.

When I was born, my father was the general manager of the Mary Mine, and he was living high on the hog. He was very important, and it was just wonderful. It was the big time! They traveled by airplane. They had a baseball team that actually traveled one time to Los Angeles by airplane. How they finagled that, I have no idea. During the boom time there might have been two thousand people, which was in the later 1930s when the Mary Mine and the Black Mammoth Mill were really going. Children were far and few between, actually, so I was kind of a rarity and was treated like a little princess—along with my cousin Susie [Sue Humphrey Thompson]. We eventually got our cousin Pete Shirley in about 1939. He was Louis Shirley's son, and his mother died in birth. He was brought up by Baba Shirley, his grandmother. Then there were the three of us, so we were very special. [laughter] It seemed like the world was our oyster!

Silver Peak was a growing town, and it was a party town! When I was a baby, they used to have progressive dinners. When my cousin Susie and I were pretty much the only infant-type children around, we used to be hauled around from house to house to house on these progressive dinners. I was told that one of them lasted three days, and I'm not surprised, because I can remember waking up on one person's bed, and the next time I woke up I was on somebody else's bed! [laughter]

They were real party people. We recently read my mom's diary, which we did not know existed until after she died. In it she indicated she hated being interrupted in her partying to have a baby! [laughter] And that was a very big surprise to us. My arrival changed everything!

A lot of the parties revolved around baseball games, which were held in what we called the ballpark. It was adjacent to the powerhouse and all surrounded by tamaracks. It was like a large pasture of salt grass, and, obviously, they had a backstop. (It seems to me that they might have also played out on the flat one time or another.) There were some places where you could bring the car up close enough so that you could sit in the car or on the car.

The teams traveled to Mina and played against Mina on a salt flat between Mina and Luning. They went to Tonopah and also played in Goldfield.

The teams were all men or all women. They had a girls' team—Leon's wife, Wilma Hill, and my cousin Gerry Hill, and Kathleen Morris (who was

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the wife of Jim Morris, the trucker) were on it. They won a state championship, and the guys always admitted that the girls were better than they were. I guess they were a real hot team! [laughter] My cousin Pete and I became very good baseball players.

#### Airplanes

Airplanes were new and exciting back then. There was a hangar on the edge of the salt flat at the north end of town, just on the other side of one of the three rock hills in the middle of town. That was apparently a fairly firm part of the marsh. There were many places in the marsh that you wouldn't dare try to land unless you could go down and put your feet on it first. We always had a windsock out. It was a regular hangar, and Jimmy Morris had a shop there where he fixed not only trucks but also the airplanes.

When the airplane took the baseball team to Los Angeles, it took off on the flat. I went along on that trip. The airplane might have belonged to the Black Mammoth Corporation. I know that Hugh Cameron always had a plane, but I don't think his was involved with these trips. Of course, Fred Vollmar was a very big deal. He was the Silver Peak tycoon-type guy. I suppose he's the one that probably financed Hugh Cameron, who was his nephew—probably kept him in airplanes and flying regalia to get him around, because he went back and forth between Los Angeles and Silver Peak.

One day I was out in the backyard playing, and I watched this little single-engine plane spiraling toward the ground. It landed propeller first in



"I watched this little single-engine plane spiraling toward the ground. It landed propeller-first in the tailings pond up at the south end of town." (Photograph courtesy of Leon Hill.)

the tailings pond up at the south end of town. It was Hugh and my Uncle Bob Chiatovich, and I watched them get out and walk away. [laughter] My Uncle Bob had a cut on his head, and that was it.

The airplane industry was so young that I guess these men were rather daring. They were a bunch of warriors! Later on they had mustanging expeditions using the airplanes, and those guys were like bush pilots. On the Goldfield side of the marsh, up against the hills, they would build fences and herd the mustangs from the foothills into these chutes with the airplanes.

Airplanes played a large part in Silver Peak when I was small.

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A little later during the war (after we came back from Reno in about 1943), the air force base in Tonopah was in full swing. And one of those flyers, of course, was Chuck Yeager, the most hotshot flyer. He, among others, used to come out to Silver Peak and do what they were absolutely forbidden to do, and that was buzz the hills—buzz my hills! It was just very exciting. [laughter] It was very illegal, and it was very dangerous, but they did it, and I looked forward to it. He also buzzed the water towers in various places. We didn't have water in our water tower. He buzzed the one at Mina, and it blew apart. [laughter] He got in trouble for that, too.

One time my cousin, Dorthella Hill (Elwood Hill's wife), was going for a doctor's appointment with her two children, Kathy and Elwood Jr. And they were driving toward Tonopah, still on the Silver Peak highway. They had just passed the volcano, and . . . this airplane had been going to buzz them and lost power, and he crashed on top of them. She saw what was going to happen; she was able to push the children down onto the floor. She was badly hurt, but the children weren't. She was in the hospital for quite a long while, and that was the turning point—there were no more buzzings with the airplanes.

# Family Home and Library

My mother and dad were married in 1934. When they knew that they were going to start a family, they asked my Uncle John Chiatovich to build

them a house. That was situated on Main Street, across the street from where the schools eventually were. It was really quite large physically. It didn't have a lot of rooms, and it was kind of a great big box.

The living room and dining room opened into each other, separated by my favorite place in the house, the bookshelves. They were very modern at the time when they were built. I think my mother really thought she'd done a great thing—a little bit of architecture there. These bookcases had glass doors, and it was just a magic place to me. It was like having my very own library



"My mother and dad were married in 1934. . . and they asked my Uncle John Chiatovich to build them a house." Barbara and Jaci Chiatovich, with their dog Tubby, next to their family's house. (Photograph courtesy of Barbara Dodgion.)

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The Families before Silver Peak had a library. My Aunt Gerry Hill always gave books for birthdays, to adults and children alike, and my father and mother always belonged to a book-of-the-month club. They were both big readers. Zane Grey, of course, was one of my dad's favorites, but my dad was also a deep reader. *Les Miserablés* happened to be his favorite book, and that always impressed me greatly. *Drums Along the Mohawk*—I saw that in an antique store the other day, and I hope I have it somewhere at home. It was a nice existence with two intelligent parents that made books available to me, where otherwise it may have been very difficult, because there was no store or library to go to.

I am wont to say I educated myself! [laughter] I started reading very grown-up books at a very tender age. My first favorite (it wasn't very sophisticated) . . . I fell in love with *Raggedy Ann*. My cousin Susie read *The Earth is the Lord's* and *Genghis Khan*. Of course, she was two and a half years older, and she was a little bit smarter than I was most of the time, but I just decided, "Boy, I can read those big books, too." I was also very much into taking what I pleased from the school cloakroom! [laughter] When I was supposed to be doing something else, I would just sit back there and read. I was very generous with the cloakroom books with myself and would bring them home. They belonged to me as far as I was concerned. [laughter]

### **One Big Family**

Now, behind our house we had a huge yard, probably two city blocks large. Part of my backyard was the middle hill—my hill. Susie had a hill, and I had a hill, which had a cave in it. My cousin Pete and I, part of our life was running up and down that hill. Pete and I were real good pals, and I was very much of a tomboy.

Below us on the hill (on my hill) was Ruby and Ernie Shirley. They lived in the house that Ruby still lives in. I can't recall if I ever knew who built it. The Humphrey's home was built by my Grandfather Frank Hill, so Susie's was on the same street as the Shirleys', across the street from the other hill. It was open house at all times between our families. That's the way that we lived. We lived with each other.

Susie was older and less inclined to be a goofball. Pete and I were just very athletic. We rode bikes, or she rode her horse, and we took on the mountains and the salt flat. One time we decided we saw a plane crash on the other side of the salt flat, and we were going to find it (didn't bother to tell anybody) on our bicycles. Well, it finally got so marshy that we had to push our bicycles, because we couldn't ride them. When the sun went down we knew we were in trouble. We never found the plane and never heard about a plane that crashed either. Our parents could see us, so they knew we were coming, but we were in trouble over that escapade.

## School

I attended all of my grade school in Silver Peak. They had three buildings going during the big time, during the mid- and late-1930s—one separate building for a high school. We all sat in the same room with the same teacher, and there were usually eight of us. There were the three of us cousins; then when my sisters finally got in, there were the five of us cousins; and until the Hills moved to Yerington, my cousin Dorothy was also there. So it was mostly cousins, but there was always someone there who wasn't a cousin that was connected with the powerhouse substation.

None of our teachers stayed very long, and we usually got the dregs, which is why I say I educated myself. Susie started school while the boom was still on, and Annie Tomany was probably everybody's favorite teacher. She was there when there were four buildings going, and she was in the little building with . . . it might have been kindergarten. After this experiment with the kindergarten, it closed. I was so crushed because I knew I was ready to go to school and read and write and everything. Annie Tomany allowed me to come to school maybe three times a week and spend a couple hours. I thought that was very lucky because she was so special.

When the bottom fell out for mining, Annie Tomany moved away, and then we had a Miss Callings from Missouri. She came out to Nevada to get a divorce, and I loved her to pieces. She is probably the first one that jumps into my mind when I am asked about favorite teachers. She was a card and kind of a party girl. She used to sit down at the Black Mammoth coffee shop, in the restaurant with guys all around her, and she was always making them laugh, and I thought, "Oh, she is so cool." [laughter] Cecilia Callings—she only lasted a year. She was my third or fourth grade teacher.

Mrs. Norris came over from Dyer, Nevada, at the south end of Fish Lake Valley. Her husband, I think, had the post office and did various things there. She stayed possibly for three years, maybe longer . . . . She was there when I graduated eighth grade. Mrs. Norris had the county fix up that little firstgrade house into a teacherage where she lived during the week. It was very comfortable and very cozy. My mother was on the school board at that time.

I went to school in Silver Peak only seven years, because by the time I had reached the seventh year of schooling, I had been sitting in the same room with older kids and had heard that Nevada history book probably seven times inside and out. I guess it was Mrs. Norris who decided to talk to the state superintendent and ask if I could be tested and go on into high school. I skipped eighth grade, boarded with a cousin in Tonopah, and went on to high school at the tender age of not quite twelve.

Well, there were boys. I had never been around boys. (My cousin Pete was just like my brother.) I was terribly boy crazy, and that was just the most exciting thing that could ever happen. I was boarding with my cousin Susie, 167

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The Families who had been there a year. Now she was only one year ahead of me, and her boyfriends would come out in cars! I had gone to a couple of dances before I went to school over there, and I got to stay with the Cavanaughs. Oh, it was very exciting! I mean, I had moved to the city! [laughter] However, it was also very hard for me to move. I always seemed to be leaving my family once that started, and that was hard.

## Family History

Dad lost his mother [Nellie] when he was nine. One of Dad's most vivid memories was his mother being sick in the bedroom in



"My cousin Pete was just like my brother." Left to right: Pete Shirley with Jaci and Barbara Chiatovich. (Photograph courtesy of Barbara Dodgion.)

Ruby Shirley's present home. That's where he lived at the time—he and Pat and Jack, two of his younger brothers. At the time, the boys were rolling tires down the hill and having them bounce up against the house and then retrieving them and doing it again. His Aunt Baba (he called her Aunt Annie, she was Nellie's sister) came out at least three times telling them that their mother was sick and please stop. But they didn't stop. It haunted him all of his life.

Dad was the oldest of five children who were then just kind of pushed around from one aunt or cousin to another, because their father was sort of footloose: he just wasn't interested in a family. My dad always tried to keep his brothers and sisters together. They were each two years apart. Bob was just a baby when Nellie died. The children tried to spend summers on the ranch in Fish Lake Valley, but the kids were pretty much split up. Jack and Dad, the two oldest, would go wherever they were sent, and Pat pretty much stayed on the ranch. An aunt (Lillian Chiatovich-McCloskey) took Bob and Marjorie, who were the two youngest, so those two had a fairly stable upbringing.

Dad continued to take care of his younger siblings his entire life. Most of them were in trouble at one time or another, and he would dig them out. My Uncle Bob was oftentimes in trouble with the law, because he was a smooth talker, and he sold land that he didn't own and forged checks—very often in my dad's name. He was, of course, a ladies' man—very handsome and much beloved by women, and I loved him to pieces. And Uncle Jack just was a heavy drinking cowboy, and would get lost and have to be brought home and bailed out. My Uncle Pat was just a little lost. But my dad was always the one that they could go to. He became the head of the family when he was nine years old when his mother died. He cared about keeping the family together, which couldn't be done, of course. When they lost their mom, their family fell apart. I don't know how much longer it might have held together anyway. Now his Aunt Annie, Baba Shirley, had six children of her own, and she started having them when she was a teenager. She did what she could, but let's face it, her hands were full. I think Papa Shirley probably made a pretty nice living. He was a bar owner.

When it came to high school, Daddy came to Tonopah and boarded with Mrs. Cavanaugh, (John Cavanaugh Sr.'s mother). John's father had the mortuary, and his mother had a boardinghouse. He and John Chiatovich had been best friends since childhood. Dad spent the four years of high school in Tonopah. It was stable, and it was home, and he loved it. He shone, and he won an appointment to West Point. But that summer after he graduated



"[My Uncle Bob] was, of course, a ladies' man very handsome and much beloved by women, and I loved him to pieces." Bob Chiatovich in 1937. (Photograph courtesy of Leon Hill.)

(1927 or 1928) he lost an eye while chopping wood, and for about two years they fought to save it. He had many, many operations. I think the story is that he had his twenty-first operation on his twenty-first birthday. They couldn't save it, so he had one blind eye.

Because of that, my father immediately started mining instead of going to West Point, but he would not have lasted . . . [laughter] I can't think of anything that my father was less like than military. He was a miner. He loved mining. He was, I guess, a master miner. I've heard that from young geologists who used to come and follow him around. He just knew what he was doing. They said that he could follow a vein in a stope blindfolded.

Fairly soon after high school he must have started working at the Mary Mine, 169

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The Families because in my mother's diary before they were married, she said, "My hon came down from the hill to visit, and I fixed a cake for my hon." So the miners lived up there in a bunkhouse at the Mary Mine. He might have worked there for as long as five years or so before he worked his way into the superintendent's job. That was kind of a big deal I would imagine, because he was a young man, about twenty-five years old, and it was a big operation.

As a child I understood how hard he worked. I was just old enough to know that my parents struggled terribly. There were three of us children, and everybody else only had one child. I knew that things were really very difficult financially. He left before I ever woke up in the morning and came back home after dark most of the time. When they were working Argentite, they had to come across the flats and the sand hills, which is an invitation for being stuck at all times, or the car would break down. They would all try to go in one car, generally in Daddy's old pickup, so if they weren't home by a certain time, the women were supposed to come looking for them. Of course, that could be like eight o'clock at night. [laughter] And if they were within sight, or if they were across the flats, they would start a bonfire, so that we would know, "Come get us." Otherwise, we just had to go out looking for them. We had a couple of real bad winters (I don't think that happened very often), and when the guys would come home they had to be dead tired, but they'd still have to dig up each other's pipelines and unfreeze them to get water. They worked terribly hard.

So mining was Daddy's life. He dreamed it and ate it and drank it. And he was going to find that gold mine! They're such gamblers. Well, he married the right woman, because my mother was a very strong person. My mother was actually deserted by her mother. Her father, whom she adored completely, eventually got her back when the people where her mother left her sent her on a train to Blair Junction with her name on her shoulder. She was six years old, and she waited until her dad heard from somebody that she was there waiting for him to come get her. From there on he just dragged her around with him—not exactly a nice existence. He was a heavy drinker also, but they were devoted to each other. Her life was taking care of him, not him doing much for her. He bought her a diamond ring and made sure she had pretty dresses, but she often sat outside in the truck waiting for him to come out of the bar, and she'd drive him home when she was just eleven years old.

My mother's father, my granddad, Frank Hill, was the most outlandish, eccentric character, and I loved him to pieces. He was so cool. He was a hoist man. He was a master mechanic. If something didn't work and he didn't have the part, he would invent it and/or make it, as did his brother, my Uncle Fayette Hill. They had genius mechanical skills. But Grandpa Frank would go off on a three-month binge, just disappear. We'd always find out where he was, because somebody would call, and we'd go get him.

He would buy a pair of khaki clothes—khaki shirt, khaki pants. He'd put them on, and those clothes stayed on him until they wore out. He always had a really small trailer house—just one of those little rounded things. They weren't furnished like they are today. He'd just drop on the bed and sleep with his cigarette between his fingers and with the radio on.

But he always had coins in his pockets, and when any kids were around, he'd reach into his pockets and throw them, and the kids would scramble for them. He was very gruff—pretended like he was just mean and didn't like anything or anybody. And he used to go, "Who-ah-ha-he-ha!" [in a deep, scary voice] to the little children, and my two sisters were terrified! I thought it was the funniest thing in the world. My granddad was a real funny guy. Just a character. He was also a carpenter. He rebuilt a hotel that he burned down. He could do about anything he wanted to do. He was about five-feetsix high and almost that much wide, and he wore his pants hanging way down just like the boys today wear their pants, because his tummy hung over the top. [laughter] Oh, he was so cute. Only shaved every few months, and he used to tell me I brushed my teeth too much: "Look at me, I have all of my teeth, and I've never brushed them. It wears them out." And he died with all of his teeth, I will say that. But they weren't very pretty. [laughter]

Neither of my parents had anyone to learn from—neither of them had a home [while growing up], so neither of my parents had a pattern for a family. And yet, they were two individuals that knew exactly what they wanted to do. They wanted to have a good, stable family. My dad decided he didn't know anything, but "Frances'll figure it out." So Mom was the disciplinarian, and she was in charge of him, too. He left it up to her—everything from finances to children—and she took care of him very well. He loved us, but we were just his play-time people, and after work he'd read to us until he went to sleep, which was pretty quick. [laughter] On the other hand, Mother was very intuitive about mothering. How she came up with some of it really surprises me. And how well educated she was, because she wasn't allowed to finish high school. She had to go with her dad to the mines .... He took her out of school when she had just started her junior year. It killed her, because she loved school. She was studying Latin and wanted to be a doctor.

### **Swinging Socialites**

When my parents were first married during the Mary Mine heyday, they were probably what would amount to the swinging socialites. My mother's diary was very short, covering the year before they were married and probably two years after I was born, but it really got across to me what a social world they had and how closely knit they were with their friends and how they kept track of each other. They went out of their way to be really social. She would describe trying to be a fancy cook, because she's having so-and-so and so-and-so over for dinner, and then she would describe what so-and-so's dinner party was like and what they wore.

The fashion! We have all sorts of pictures of my mother in these really great getups, and we never knew our mother as a clothes horse at all. Of

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course, when we were growing up, my mother had maybe three house dresses, and they were always tattered. And I know that made my dad feel bad: my dad really cared. But early on Mother was very, very into having a new party dress every time there was a dance. The mother I knew was the most unspoiled person in the entire world—the most down-to-earth, sensible, person; but this person we read about in this diary was peeved because her party dress didn't arrive in time for the dance. [laughter]

Oh, they were so social! They would to go to breakfast next door, run over to Goldfield and see so-and-so, on to Tonopah to see somebody else, and on their way home stop up at the Mary Mine and visit and see who was there and then come home and have dinner with somebody, or somebody was dropping in, or they were going to Fish Lake for a party. They were far from being isolated.

But the war, of course, is what really closed it down. From there on, there were just the thirty to thirty-three of us that comprised Silver Peak. They called themselves "the clan." When we went overnight on fishing trips for the Fourth of July or to the rodeo or whatever, we went as a clan. It was an interactive, extended family, and it was absolutely the most perfect way to grow up. We belonged. We were part of a large, extended family. Everybody took care of everybody.

# **Family Corporation**

The three cousins—Harvey Humphrey, Stanley Chiatovich, Ernest Shirley—formed a corporation for their mining endeavor when they came home from Reno in order to try to make a living for themselves. This was after the big mining interests were gone. The corporation included mining operations and the cattle operations. They decided to run some cattle, and Harvey Humphrey was in charge of the cattle because he was a horse person. My dad was a miner, obviously, and Ernie Shirley, his cousin, was also a miner. They were the three major holders, and then they took care of various people on the side, like another cousin, Louis, and Baba, who was Louis and Ernie's mother and my dad's aunt.

The same corporation also owned the store where their wives worked. The store used to be called the Northern Supply Company, which was owned by the Smiths (Lindsay and Gordon) before they moved to Gabbs. There was a movie theater on one end, but I never could get them to open the movie theater for me. [laughter] There'd once been a hardware store. Anyway, they opened the bar, grocery store, and the post office, and the three ladies took shifts running them.

In 1947 or 1948, it burned. Oh, boy, do we remember that! It was absolute . . . Well, it was just a conflagration. It was early in the morning, and I saw there was a fire down there. I used to babysit my younger sisters during the day while my mother worked. (My mother never worked the bar at night.) I ran out our back steps, which were long and kind of steep, down toward

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"The store used to be called the Northern Supply Company, which was owned by the Smiths (Lindsay and Gordon) before they moved to Gabbs." The Northern Supply Company in 1938. (Photograph courtesy of Barbara Dodgion.)

Ruby and Ernie Shirley's house screaming at the top of my lungs, "Fire! Fire! Fire!" And nobody was home, so I went on to the power company and screamed . . . . My cousin, Gene Boyd, was the power company guy. The power station is where the only telephone in town was, so maybe that's what I was supposed to do. He got on the phone and told Tonopah that we needed any help anybody could send.

We had a two-room, walk-in icebox in the store. Because we had cattle and slaughtered cows, we had whole carcasses, et cetera. And because we were quite a ways away from civilization, we had crates and bags—large stores of things. Anyway, the one thing that remained with us forever was the smell of the cooking eggs and ham .... Nothing was left standing.

We children thought it was quite an adventure, of course. It was very eye-opening to us. A fire like that makes your blood run cold, but the excitement was just too much. My little sister Jaci wanted to run away. She was very afraid. And all the children were herded into my backyard, because it was far enough to be out of harm's away, but we saw a barrel go way up into the air and explode—oil barrels I would assume.

They sent help out from Tonopah. It took a little while, and by that time there was nothing anybody could do. That night after the fire, when everything was gone, people came from everywhere—from Hawthorne and Goldfield—people that wanted to help, and people who just wanted to look. Many that we didn't even know brought food. We must have had a very large potluck that night.

It was a catastrophe for the adults. Absolutely. First of all, they had to regroup for the post office immediately. There was nothing salvageable. I can't tell you whether they were well covered by insurance. If they weren't, they lost everything. They weren't a very going concern in the first place, although they were listed in Dunn and Bradstreet. My father was very proud when he got word that they had been listed in Dunn and Bradstreet. It was a very big deal to him. It meant he was legitimate. I thought that meant he was rich. Far from it. It probably meant he wrote a letter. [laughter]

After the fire, I saw my dad and Harvey working over their books. I knew it was bad. Out of three businesses, one business was suddenly gone.

I don't know how they pulled out of it, but they did. Nobody lost their house or had to sell their car or anything, but they didn't have a lot other than that anyway. And for the town, the grocery store, which was more like a quick stop, was gone; along with the bar, which was a social center; and the post office, which was also a social center. We'd had a jukebox in the bar, which you could just reach around the back and click it—you didn't have to put money in it. Wonderful! [laughter] We didn't have a movie, but we had a jukebox.

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I cherish the Silver Peak part of my life. It's a magical place, because Pete and I had the entire salt flats. We had our hills. We had the mountains behind us. We just knew them so well. When we couldn't ride our bikes, we hiked. We had the sand dunes over on Goat Island. We had the tailings to play in. We even tried to ski on the tailings, but it just didn't work! [laughter] To me as a child, it was adventure as well. I couldn't wait to get up each day and do whatever it was we were going to do, because it was exciting! Sometimes we would play cops and robbers, and we had like half a county to play in! [laughter] We just had a wonderful time.

I know I'm independent for that reason. For instance, in bringing up my children, going to the hospital is not the first thing I think of, or calling the doctor is not the first thing I think of. I take care of it myself. I look back on some of the things that my mother did, and she must have been petrified. She didn't have a mother to call. My sister Barbara nearly died of whooping cough when she was just a few months old. Can you imagine? Out in the middle of nowhere and not knowing what to do.

Also, I was allowed to be very athletic, and I had a lot of time to read. I think we were well educated because we read a lot. And I'd go around with my dad oftentimes. He thought I was funny and cute, and that was a nice feeling . . . growing up someplace where everybody loves you.

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### BARBARA DODGION: WE DID THINGS TOGETHER

Barbara Chiatovich Dodgion was the second child of Stanley and Frances Chiatovich. Born four years after Janice, she may have missed some of the good times, as Janice claimed, but she didn't miss a beat in describing the intertwined genealogy of her family and the close friendships that transcended blood ties. In Barbara's oral history, her happy childhood memories reflect a feeling of safety in a

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community where the residents were nearly all related—aunts, uncles, cousins, grandparents.

I was born in Tonopah, Nevada, February 25, 1940, delivered by Dr. Craig. My parents lived in Silver Peak, and they drove to Tonopah so I could be born. My father was Stanley Martin Chiatovich, and my mother was Frances Lillian Hill Chiatovich. My father, Stanley, was very busy with mines there in Silver Peak.



Barbara Dodgion. (Photograph by Victoria Ford.)

My mother, Frances Lillian Hill, was in Goldfield, but her father [Frank Hill] ran the mill with my father in Silver Peak. When my mother married my father in 1934, she moved to Silver Peak. I was born in 1940, and we moved to Gabbs in 1950 when I was in the fifth grade.

My grandfather on my father's side was Martin Chiatovich, who was the son of John, one of the early settlers in that area who started the first cyanide mill. They came into Fish Lake and settled on a ranch there. Martin was married to Nellie Cleary, and they were the parents of my father, Stanley Martin Chiatovich. Our family has double cousins on my mother's side of the family. My mother's father Frank Hill was married to Lillian; and she was sister to Geraldine or Gerry, whose husband was Fayette Hill; and Fayette and my grandfather Frank Hill were brothers. So sisters married brothers.

My Grandmother Lillian divorced Frank. She went down to San Francisco where she remarried a man named Jorgenson and had another family. But my Grandfather Frank stayed up here and worked in the mines and in the mills. After the divorce, my mother stayed with her father. Granddad then married a lady by the name of Betty, but they were only married for two years when my mother was nineteen. Well, in her diary it says that Mama and Daddy were engaged on Christmas Day in 1933, and they got married February 2 in 1934. Ruby, who was Betty's sister, and Ernie Shirley stood up with them, and I think they were married in Goldfield. Then they went (and this amazes me and my daughters) on a honeymoon, and Ruby and Ernie Shirley went with them. [laughter] I think they went to Las Vegas, and they had a good time. Mom and Ruby went shopping a lot, and then I don't know what the men did. [laughter]

I knew that we were all very close when I grew up, because we always had potluck dinners out on the marsh. And whenever we did anything, it was all together. We went swimming together. We walked, everything.... We just did it together. That's how you grew up—with other people. Every evening Mama and Ruby and my sister Jaci and I would all meet, and we'd 175



"I knew that we were all very close when I grew up. . . . Whenever we did anything it was all together." Left to right: Jaci, Frances, Janice, and Barbara Chiatovich with an unidentified friend in 1947. (Photograph courtesy of Barbara Dodgion.)

go for a walk down by the water hole or down by the marsh. We just walked around Silver Peak. It was always fun, just walking along and seeing everything. We would skip and hop, and Jaci and I would be way ahead while my mother and Ruby would be talking. They were close friends.

In a community like that, when you don't have a lot of people, everybody more or less does things together. Everyone was very close. We'd all get together and go out on the flat and have a supper. We [children] were free even in the town, because everybody knew everybody. We had certain areas that we couldn't go in. We had a hill behind our house, and if my sister and I wanted to go up on that hill, we had to make sure that our mother knew that's where we were going. Everybody kept an eye on everybody else. You couldn't do anything bad or everybody would know. [laughter] We weren't allowed to wander—my mother did know where we were.

Most of the people who lived there in Silver Peak were all related, so more or less everybody owned or had a part of the work to do. [laughter] The women who ran the store were my mother, Frances Chiatovich, Ruby Shirley (who is now Ruby Griffin), and Virginia Humphrey.

After the fire burned down the first store, it wasn't too long before they started the other store up on the main street where people continued to get their mail and their supplies. My Uncle Marco [Martin's brother] would bring in the supplies from Tonopah. The railroad came in from Hawthorne and

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went over to Tonopah, and they had a stop where you turn off to go to Silver Peak. They would leave the mail, and my Uncle Marco picked it up. Sometimes my mother would go, and we went with her, like when we were ill. We'd take our paper dolls and things, and my sister and I would play in the back of the car . . . . Mother usually wasn't there a long time. We'd go down with her when she tended the store, too. They took turns operating the store.

Our family was very close, too. My mother was a homebody. She was involved in community things, but her family came first. She made sure that we all were taken care of. Always did. She was a good cook, loved to cook. While I was growing up, my father loved to read, and he would read a story to us every night. He wouldn't finish the book all at once. We'd have certain chapters every night. We'd climb up on his lap and listen to stories. *Black Beauty* was my favorite, and *My Friend Flicka*. Also on Fridays at school, we would have a book like *Treasure Island*, and my teacher would read certain chapters for an hour or so.

Mommy did her sewing at night. She either would embroidery or mend, or she sewed dresses. She did that when everybody was in bed or sleeping. She sewed most of our clothes. It was not like going down here [in Carson City] where we have lots of stores. We would go to Tonopah and do our shopping sometimes, which was fun. We would take off and go to Reno to the rodeo, and Mama would do some shopping then. But in a town like that, if somebody was going to town and we couldn't go, we would give them a list, and they would shop for everybody.



"My Uncle Marco would bring in the supplies from Tonopah." Left to right: Marco Chiatovich, Roy Cleary, and an unidentified gentleman, in Silver Peak. (Photograph courtesy of Barbara Dodgion.)

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when Often we wanted something, we ordered it from the catalog. Catalogs were very prevalent—Sears, Montgomery Ward. I don't remember Penney's. In Mama's diary, I laughed, because she kept waiting for a dress that she wanted to have for her dance, and it wouldn't come. The coat came, but the dress didn't come. Then if it didn't fit just right, there were always people that would help adjust it. That's how things were done. Our favorite



"While I was growing up, my father loved to read, and he would read a story to us every night." Left to right: Stanley, Barbara, and Jaci Chiatovich. (Photograph courtesy of Barbara Dodgion.)

thing for my sister Jaci and I was the Christmas catalog. I think we marked every doll. [laughter] We would mark mostly toys, but every now and then there was a dress or something that we liked, or shoes. We got our Christmas presents by the mail, so we always made sure to order things way ahead of time.

For food, we would go to Tonopah. For meat, our families owned the cattle. Harvey was the main one that took care of them, but I imagine they all did. You just had the wide open ranges, and that's where the cows were, and the horses, too. And then they'd have a roundup every fall, and they would brand the calves and take care of them. Everybody did that, unless somebody was ill or something. Everybody did everything together, or things didn't get done. [laughter] Children weren't really allowed to go to the roundup, because that was a time when the adults were working and couldn't watch us. But I do remember the cow camps, where the women would do the cooking and take the food to the men.

If Mama and Daddy had to go off someplace, I remember staying with my cousin, Virginia, and I'm sure I stayed with Ruby and Ernie and other relatives. They always kept an eye on us, but mostly we went with our parents. If they couldn't take their kids, I guess they just didn't go. I went everywhere with my mother. When she was busy doing something, we were taught to be quiet and not interrupt.

I only remember happiness when we were in Silver Peak. I had a wonderful family, and I just remember good times. I imagine there were hard times, but when you're a kid, you don't know that. [laughter] I guess if there were hard times, they didn't harp on it. It was during wartime. Things were hard to get, but I'm sure it probably wasn't as hard for them as it was for some, because they were pretty self-sufficient. They had the cows, they had food, but everybody had to ration, so I'm sure it was hard for my mother and father.

Mama was always a homemaker until after Daddy died of Valley Fever in 1960. Valley Fever attacks your spinal system and your brain: you lose control of your balance and things like that. Down in the Owens Valley, down by Bishop and in that area, you can get that fever, and one of his aunts had died from it. Actually, he had an operation at Stanford in San Francisco to take the fluid from his brain. He came through the operation just fine, but that night he got a blood clot in his leg, and it traveled to his heart, and he died. After his death, Mama became postmaster of Gabbs then moved to Yerington after she retired.

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## **RUBY GRIFFIN: THE FAMILY BUSINESS**

Ruby (Shirley) Griffin has lived in Silver Peak more than 60 years. Born in Texas, Ruby arrived in Silver Peak during the Depression as a young, divorced mother needing a home for herself and her son. She lived with her sister Betty, who was married to Frank Hill. Frank's teenage daughter, Frances, was also living in their

home near the Mary Mine. Frances and Ruby quickly formed a friendship that lasted a lifetime. Frances was dating a young miner named Stanley Chiatovich. Ruby met and married his cousin, Ernest Shirley, who was also a miner, and they lived near the Mary Mine. Ernie died in 1959 from silicosis, and Ruby stayed on in Silver Peak serving as the town's postmaster for forty-seven years. At the time of her oral history interview she was married to Milton "Griff" Griffin, and her best friend Frances had recently died.

# Store and Post Office

When the town died down after the mines closed down, we bought the grocery store out and the bar—



Ruby and Ernie Shirley. (Photograph courtesy of Sherry Mattei.)

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Frances and I and Virginia Humphrey (she was Ernie's sister) and her husband. And we ran that for years. It was [the former] Smith brothers' store . . . . It was also a grocery store, and we had a meat market.

We all shared the work. I was the postmaster. That's when I took over the post office from Claire [Curran], November 8, 1944. But everybody helped run the store, and everyone worked at the bar. When the mail came in, one person was always there to take over everything else while I just took care of the mail. I had Sunday off, and we didn't keep as long of hours on a Saturday.

The mail would come in just once a day. At that time the mail would come from Big Pine, and then it went on over to Goldfield. The next day it came in from Goldfield and went the other direction. The mail carrier stayed overnight in Goldfield: he had a cabin over there. Well, he would come to Silver Peak in the morning, but the time varied depending on which direction he was coming. I think that he got in about ten-thirty or eleven o'clock. It especially varied in the wintertime, because sometimes he had trouble getting over that mountain. On the days he would be coming from Goldfield he would get there earlier, because he just had a short drive then.

## Silicosis Strikes

That was during the war, and some of us stayed and some had to go to service. It was quite a comedy for awhile. Ernie went as far as Salt Lake City, but then he couldn't pass the test to get into the military. He had been in the mines too long . . . his lungs. They told him he had silicosis, and he didn't believe it. He came back and told me, "Oh, I didn't get a thorough examination."

Then the military called in everybody that had already had examinations. When they called him again, he told me, "Now this time they're going to test me like I want them to test me." He really had a lot of determination. But determination or not, he had silicosis. They never even gave him all of his tests again.

Well, that time he came back and decided he would go to Tonopah. We knew the doctor over there real well and wanted him to x-ray him again. I was with him, and the doctor over there didn't want to test him. He kept telling him, "Forget it. Forget it."

"No," Ernie said, "I'm not going to forget it. I want my lungs x-rayed. You're the one that takes x-rays of everybody that works in the mines, and you're going to x-ray me." And so the doctor x-rayed him.

Ernie said, "All right. I want to see the x-ray. I'm not leaving this office. I paid for that x-ray, and I'm going to see it!"

The doctor didn't want to show him, but when he did, he was so mad that he threw that x-ray at him. He says, "Take the goddamned thing and look at it. I don't know how you ever got the silicosis you got, but it looks to me like somebody shot you in the lungs with a shotgun." That's just what he told him, so it was bad.

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Then Ernie decided he would go to Carson City. He wouldn't let me go with him and drive or anything. They couldn't do anything for him either. His lungs were gone. There was no hope. There was nothing they could do for him. He could still work, but I think he got tired quicker than the others did. He was one of the ball players, and he would just bend over with trying to breathe after he would run. But when I said, "I don't think you should run because of your breathing," he said, "My breathing's all right. Everybody does that." It's wonderful when you've got that much determination, but sometimes it doesn't do you any good.

He thought he'd been careful. And he had bought those wet . . . those breathers.<sup>5</sup> He wore that on his face, and he was careful but not careful enough. I think that he would take it off, especially with the men talking to him. He would take it off while telling them what to do. And I think he took it off a lot more than he realized, or took it off outside of the mine thinking he was out of danger. Even though he was the boss, if they were working in places where he wanted it to be exact, he did the drilling—to be sure those blasts went off just exactly like he wanted them to and headed in the right direction. And I think he just did that too often.

But then he lived fifteen more years and died in 1959. He went on working right on up to the last. When you were living with them, and they just go ahead strong like that (and he had lots of willpower), there's nothing that you could do. We didn't talk about it unless it came up, because . . . . Well, it makes anyone angry that has something wrong with them, and then they think you're trying to make it worse than they think it is. So we just avoided that one subject. It was his body; he wanted to do it his way. And if it upset him, that certainly didn't do him any good. I don't know how many died of silicosis, because so many times they seemed to die of pneumonia or something else instead.

#### Post-Office Perspective

I liked working in the post office. I like people. I have seen the population go up and down here. [laughter] I'm always glad when it's going up, not when it is going down.

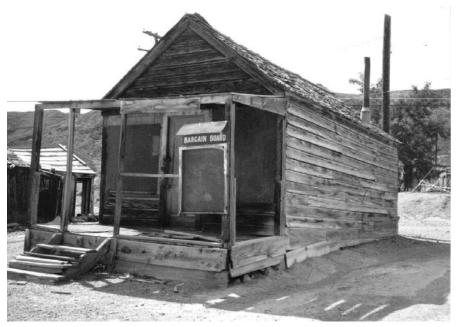
We had improvements in the postal service. The mail has always come in once a day and gone out once a day. It used to come in from California first. Oh, we got so many complaints when they changed it, from people ordering from the catalogs—Sears and Montgomery Ward from California. It's unbelievable the way you could just order down there, and it would come right on back up so fast—maybe two days. Well, then it didn't come up so fast when it changed and came from Las Vegas. That slowed it down, and it took about a week to get up here [in the late 1960s]. They claimed when they had made the change that it would be for the better, that it would bring the mail in faster. They always tell you that. [laughter] 181

### **Fire Destroys Business**

One of our refrigerators had stopped in the store, and we sent it to be fixed. We had just gotten it back, and everything was all right when Marco Chiatovich, who had a key to the grocery store, came in that morning to pick up the mail. He left right after six o'clock in the morning, and we didn't normally open up until nine. We decided that refrigerator must have set the fire off, because before we opened someone told us that the building was on fire.

We rushed down there. In the far end was the post office with a big, plate-glass window, so we just broke that, and I got in there and saved all of the mail! I even saved the old desk we used. I was determined to get everything, including all of the old records. I took all of the mail out of all of everybody's boxes, so I even saved all of that. The post office was closed off from where the fire was going in the grocery store. They were screaming at me, "Get out of there!" Well, I knew I was safe in there. I could see there was smoke starting to come in around the door, but there was no danger to it. And not a one of our three husbands was in town: they were all up at the mine working. The men who were in town at the time helped, and we fought the fire by hand, but the entire building went. Everything.

When the Black Mammoth building went up for sale, we acquired that and moved over there. Then I moved into the small, one-room, wooden building, which is still standing near the mobile home that is the post office today.



"I liked working in the post office. I like people." The old post office in Silver Peak, 1996. (Photograph by Victoria Ford.)

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# **Barroom Incident**

One night three men were having a party there in the bar, and they just got out of hand. That's when I decided I was going to get out of the bar. What got me was that you think you know people . . . . I had known those men ever since I had been here. And it was about one o'clock, so I just cut them off [no more alcoholic drinks]. Then they just threw things at me like the salt shaker.

I didn't serve them another drink, and they didn't come behind that bar either. We had a blackjack there. I said, "You come behind that, either one of you, and this is it." Oh, they told me how smart I thought I was and criticized me and called me names. But somehow Ernie, who was up at the Mary Mine, heard about it, and he came down to see. And when he did, they were fired, and they moved away from here, too.

They left after two or three hours. I think I got home about four o'clock in the morning. I wasn't scared. I was mad.

The one fellow, the fighter Eddie Murphy, was working under my husband, who was up there at the mine that night. He was the worst. He always thought he was smart. Of course, he was just a fat boxer. But that was natural for Ed if he got drunk. He really tried to take advantage. And to tell you the truth, when he was in the ring, he was a good boxer, but none of the men were afraid of him. And he had wife problems and girlfriend problems all of the time. He brought it on himself. He had a drinking problem. I think that's the reason he didn't get any farther with his boxing career. He just lost control.

Most of the miners just have a few drinks, the majority, and maybe a third drink, and that's the end of it. There were certain ones that couldn't handle it, but not many. [If they had a problem] most of them would go and help themselves.

# Nivloc Park

One year we got involved in building the park at the Nivloc. Well, we just took toilets and old furniture up there, and we put some tables up there. The men built some fireplaces with rocks so they could put grills on it. The park was mostly for picnics, but there were different ones that stayed overnight, and through the years they continued to camp up there overnight. They had some wild parties up there.

The people who started camping there two or three days didn't want this area made into a park. They wanted it for their own private use. They said we were taking over, when we were the ones that had started it originally. So we just decided that we were going up there in spite of their attitude. I was driving our pickup, and this fellow was trying to pass me and started forcing me off the road. But it was wide enough that I just moved 183

over and just got ahead of him and went on. Well, the women that were with me, including Frances, said, "Ruby, he's going to hit you."

I said, "I've got room to drive. As long as I can drive, I can get ahead of him. I know who he is. I think he must be drunk."

Well, we got up there, and we got the food ready for serving. Everyone was going to have to buy their food that day to raise funds for the pool down here in Silver Peak. We had things going pretty well when they just came up to us and said, "Well, the party's over." They just started trying to tear every-thing up, and, of course, that just started a fight—the men and the women, too. We just let them have it. [laughter]

Can you believe that we just got a downpour of rain at that time? That was the funniest thing. I was so glad. [laughter] Oh, we just grabbed everything like crazy, because we were right in a place where a cloud burst hit us, and it could have caused a flash flood. Some of them were still fighting while we were loading up.

We didn't think we came out much ahead on the money for the pool. [laughter] It was just so wild .... But this is what I liked about it—when we came down everybody laughed and said, "We won. Beat the tar out of them." Anyway, the conflict just died out. We just took care of it then, and that was the end of it. Oh, we'd talk and laugh about it to ourselves, because we thought we won. [laughter] How can you win in a downpour?

Elton Parsons built the lake for that park. Somehow or another we did get \$1,100 and paid him. Well, that sounds like a lot, but for the amount of work and the days that he went up there and had his men and his equipment up there, that wasn't a drop in the bucket. He closed in the canyon, and then the water from the Nivloc Mine went into that lake. Then the state furnished and planted fish for kids. Later on I guess the state demanded that they close up the Nivloc. And when they did, they closed this tunnel where the water came out that watered birds and chickens, and there were fish in that lake. It just dried up.

### Friendship with Frances

Frances had a mother living down there in San Francisco, but she didn't have anything to do with her. I guess she was the one that told me originally [about her mother abandoning her], but she didn't talk much about it, because she didn't like to talk against her mother. Frank [her father] arranged for her to come back [to Silver Peak], and the people who had her put her on the bus. She had to change buses, and they put a tag on her saying where she was going. The bus stopped out here [at Blair Junction] and let her off. They just put that little kid off right out here up at the highway, and she started walking in.

Well, the trucks didn't go all the way to the highway, and Frank had told the truck driver, "If you see a little kid out there, you pick her up."

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But when she left San Francisco someone had told her, "If anybody tries to pick you up, don't let them." [laughter] So they had a problem, until he finally talked her into getting in the truck.

Frank kept her from then on. He boarded her out if he was living out on a job. As a matter of fact, one woman she lived with for several years off and on. Frank picked her up and kept her in the summertime if he could. Then when Frank and my sister Betty were married, Frances was living with them. [Frances and Ruby met at this time.]

Frances would always say, "Well, you are my best friend," and we were the best of friends. She was a very nice person, and she was very interesting. She did lots of handwork of all sorts, and she was a good housekeeper. Frances lived right here in back of me. Her house faced the highway, and mine faced this street down here.

We went for walks every evening. Mostly we followed the same route. We would just go out of town down by the powerhouse, out on that road, and then go out there on the flat. The reason that we did, it was easy walking. When we started walking here in town . . . we were just like the Pied Piper. And Frances always had a dog, and I always had a dog, so we had plenty of dogs and kids. [laughter] We didn't mind, and we didn't say, "Do this, and do that." If they wanted to walk with us, they had to know how [to behave]. Out there the dogs could run and the kids could run, and we could just go on about our own business and walk. This was to get her exercise and mine. I was born and raised on a ranch where everybody worked. You didn't have to take walks there to get your exercise. There were always cows to milk, and the women did that because there were other chores for the boys. [laughter] But housework and watching kids, that doesn't always give you that much exercise.

When Frances and Stan moved to Gabbs in 1950, I'm sure we must have paid her something for the supplies and her interest [in the business]. And then Virginia Humphrey and I ran it. Well, Virginia never liked to work, really. She was a little older than we were. So when Frances got out of it, then Virginia wanted out, so we paid her off, and she didn't work anymore. Harvey had the service station across the street, and he was working for the power company, so Virginia would sell the gas and do things over there while he was on duty. But as soon as he was off duty, then he took over.

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Then I ran the store and post office. There weren't that many people in Silver Peak then. It had died down a lot. And, of course, my hours weren't as long . . . . When we started back up after the fire, we just had a small store there. While I was working in the post office, people would just gather up their groceries, and then I would go in there and ring it up on the cash register. They had to wait on themselves. Then it got to where I just did the post office. The mail came out of Tonopah, and if people wanted groceries, Marco Chiatovich would bring out their groceries for them. 185

After Frances moved to Gabbs, which was about one hundred miles away, we still visited. Stan and Ernie still had mining equipment, and they were in touch about different claims. She came over quite often, and we made it over there quite often. Ernie passed away first, because Ernie had been in bed some time, but they were both sick at the same time.

Then Frances took Stan over into California. [This time] was tougher for her.... She was away from home, away from her kids, worried sick about him, trying to get something done for him. I was right here at home with Ernie. After he got out of the hospital, he said, "I'm never going back. They aren't doing me any good. I'm passed the helping stage."

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# SUE HUMPHREY THOMPSON: FAMILY TIES

Sue Humphrey Thompson wrote a brief memoir of her childhood in Silver Peak for this project. The daughter of Virginia Shirley Humphrey and Harvey Humphrey, Sue was also the granddaughter of Anna "Baba" Cleary Shirley and cousin to Janice (Chiatovich) Johnson and Barbara (Chiatovich) Dodgion. She offered descriptions of some important Silver Peak personalities.

When I was born in 1934, my folks were living in Silver Peak, and I spent my childhood there. My mother, Virginia Shirley Humphrey, also was born in Silver Peak. Her mother, Anna Cleary Shirley, lived in the house across the street out our back door. My mother had grown up in that house. Anna, or "Baba" as everyone called her, was from an old Nevada family but was born just across the California border in old Benton. In 1884, when she was three months old, her parents, Katherine and John Cleary, moved to the Silver Peak/Blair area. Baba lived most of her life in Esmeralda County. Katherine had been the first white child born in Aurora.

Baba married my Grandfather John Shirley in 1900. John had been living in Goldfield and was part owner of the Palace Bar and later served as a deputy sheriff. He moved to Silver Peak where he owned the Silver Peak Palace Bar and was also involved with mining properties. I'm not sure when he moved to Silver Peak, but I have a record of him buying property there in 1905.

Baba was tall for that time at a height of five feet, ten inches, and John was six feet. When they married, John was thirty-nine and Baba sixteen. They had seven children. Two died in infancy. John's reputation was such that his saloon was well managed and little or no trouble occurred. He was soft spoken and appreciated good manners in both his business life and home life. My mother related a strict adherence to table manners. She also thought him kind and caring. I have old postcards from him to her when she was a very small child. He had endearing names for her and would assure her how he missed the family and would be home soon. These cards were from a time

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"Baba married my Grandfather John Shirley in 1900." John and Anna Shirley. (Photograph courtesy of Sherry Mattei.)

when the family was relocating to Oakland where he was establishing a business and finding them a home. They only stayed in Oakland three years. One of the stories the family told was that John was underground in one of his mines and a large timber fell and struck him on the head. Because of his muscular neck and shoulders, he survived without apparent harmful effects, but forevermore had a dent in his skull. He died May 28, 1939, at the age of seventy-two. My memories of him are sitting in his lap and being amazed at his mustache. I felt very secure and special.

My father, Harvey Humphrey, grew up in Manhattan, Nevada, but attended Tonopah High School, where my mother was also a student. They were married in 1929

when Harvey was twenty-four and Virginia was twenty-three. Within a few years they moved to Silver Peak. Aside from living in Tonopah and Reno during the war years and a short stint at Hoover Dam construction, my dad spent the rest of his eighty-one years in Silver Peak.

My father worked for John Shirley for a short time, then he and Stanley Chiatovich (my mother's cousin) and Ernest Shirley (my mother's eldest brother) became partners. Their business was mining, and they did exploring, leasing, and handling claims. The Mohawk at Argentite was a property discovered by Ernie, his father, and Harry Stimler. They also did leasing at Mary Mine and other areas. Around 1947, the wives of the three partners— Virginia, Frances, and Ruby—took a lease on the old Northern building and operated a post office, grocery store, and bar on the premises. It burned down in a spectacular fire that threatened the entire town.

The Shirley, Chiatovich, and Humphrey partnership started during the 1930s, and around 1942 the partners bought range rights and cattle belonging to Jack and Nellie Coughlin and a partner named Flint, all of Silver Peak. The cattle were run in the Clayton Valley during the winter, and when summer came they were moved to the mountains in the southwestern 187

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"[My parents] were married in 1929 when Harvey was twenty-four and Virginia was twenty-three." Virginia Shirley and Harvey Humphrey's engagement photograph. (Photograph courtesy of Sherry Mattei.)

end of the valley near various springs and old cow camps. Jack Coughlin and Flint were old and the cattle operation was in disarray, so a lot of work was required to gather them and get things straightened out. My mother and I helped when we could, and it was quite exciting. Some of the cattle were loco and others just wild. Ernie and Stanley mostly stayed with the mining activities, while Dad took over the cattle business. They would all help one another as need arose and time permitted. They also took on other jobs, as work and money were in short supply. Everyone got along and remained friends for life. I was always eager to "help" my dad with the horses and cattle, and when the situation was appropriate he would let me. We had a lot of adventures and stories to remember of that time. My dad had spent much of his early years working on the ranches in Monitor Valley, and his family were horse lovers, so the cattle business was of interest to him. It was difficult to count on raising many cattle in that area, so my

dad could run the cattle and also hold other jobs. Beside his mining activities, he spent seven-plus years working for the power company in Silver Peak, which is now known as Southern California Edison.

The cattle business led him to become involved in water rights, and he spent a lot of time securing the legal rights for the springs and creeks in the area. Also, this was a time of change in grazing on public lands, and he became involved with the political side of that. It was an era and a place where people had to become competent in many fields in order to survive. While riding in the mountains looking for cattle, he always kept an eye on the rock formations. Along with the stray cattle, he would arrive home with a sack of rocks to be panned or assayed.

My dad was always active in the community of Silver Peak. He served Esmeralda County nine years as a state legislator, first as an assemblyman from 1958 through 1962, and then as a senator from 1963 through 1966. Always aware of the importance of water, he tried to see that the various springs and streams in the area were kept open and running for the wild creatures. In 1964, he investigated and helped establish Silver Lake up near Nivloc. In 1969, he spent lots of time and effort to help with the establishment of the Silver Peak townsite. He bought the small gas station from the estate of Marco Chiatovich and ran it along with a propane service. People dropped by the house when they wanted gas, and Harvey would either give them the key or walk up and pump the gas.

Baba Shirley was everyone's favorite grandmother—a very nurturing person. She could make a wonderful meal with "nothing in the house." She cooked on an old wood stove, and her rolls, pies, and other dishes were wonderful. She made pies out of everything that she could find. She was the eldest of her siblings, and when her mother died young, leaving five boys and one girl, Baba became like a mother to the boys. Later her younger sister, Nellie, who was married to Martin Chiatovich, died in childbirth.

Nellie left four boys and one girl behind and some of them spent a great deal of time with Baba. In 1939, John Peter Shirley (Pete) was born to Baba's youngest son Louis and his wife Helen. Helen died of complications, and Baba again had a son to raise. Even in the last years of her life, children would stop by her house and visit, and for school plays and town celebrations a special seat was always reserved for Baba.

Pete Shirley was five years younger than me. He had red hair and a freckled face. He was like a little brother and participated in many of our adventures. He was very lovable, and we all thought we should help raise him.

My mother's sister, Ethel Shirley, and my dad's cousin, Hank Gilbert, moved to Silver Peak about 1936. They had married in Tonopah in 1928 and were very close to my parents. They lived next door where they owned and operated a general store. Their daughter Colleen was four years older than I and was like an older sister. During the war years, business in Silver



Virginia Shirley Humphrey doing dishes in Baba Shirley's kitchen. (Photograph courtesy of Sherry Mattei.)

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Peak dwindled, and in 1943 Ethel and Hank literally moved their store to Hawthorne and lived there the rest of their lives.

My mother's older, brother Ernest Shirley, and his wife Ruby lived on the other side of us, where Ruby lives to this day. Louis, a younger brother, was in mining throughout his life and lived most of it in Silver Peak. My mother's youngest sister, Jane Shirley, married Gene Boyd, and they had two children, John and Sherry [Mattei]. Gene worked as an assayer and with the power company for several years after their marriage before leaving Silver Peak. Sherry later returned and worked for Foote Mineral for several years.

Silver Peak was a fun place to grow up. Even though there were very few children during most of my school years, the closeness of a small town and the unique environment were a rare experience. From the time I was in the fourth through the eighth grades there were less than ten students in the eight grades. It was a one-room, one-teacher school. We had some good teachers and some not so good, but I was lucky enough to have a couple of years with Annie Banovich Tomany.

The reservoir was our swimming hole, and Fay Hill would gather the local children and watch out for us as we swam on summer afternoons. The large marsh and shallow lake formed by the runoff of the springs that fed the reservoir were wonderful for viewing migrating waterfowl and other occasional animal visitors. A walk around the marsh pond on a summer evening was always an adventure. Sometimes we would find injured birds and take them to Baba's chicken house and yard to mend. In the winter, if the wind didn't blow and freeze the marsh pond rough, we could ice skate on the



*Left to right:* Jaci and Janice Chiatovich, Sherry Boyd, Sue Humphrey, Pete Shirley, and Johnny Boyd. (Photograph courtesy of Sherry Mattei.)

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pond. The salt marsh was a wonderful play yard. A bicycle ride or a walk across the salt to Goat Island and then a slide down the sandy side was exhausting.

Some summer evenings, the town would gather at Coyote Knolls, a small volcanic outcropping surrounded by the salt marsh. We would build a fire and have a wonderful potluck. Games were played, as the marsh was soft and smooth, wonderful for hopscotch, jump rope, and other local games. Just walking barefoot on the surface was wonderful, and if a moon was full, the illumination on the white salt made it very bright. Occasionally, we were able to get someone, or maybe a group, to take us to the sand hills where we had fun sliding and falling down the steep sand hills. We also looked for arrowheads there. Getting the car stuck in the sand was always a possibility.

Silver Peak had its share of interesting people. Thomas Whyte had been a Justice of the Peace and lived in a house made of bottles. The bottles were laid like cordwood to make the walls with plaster holding them together. When viewed from outside, what you saw were bottle bottoms. He was a real gentleman, and every child that graduated from the eighth grade received a year's subscription to *National Geographic* from him. As I'm sure he was on a very limited budget, it's fortunate that there was only about one of us a year graduating.

Across the street, out our front door, lived Nellie Coughlin. She was the widow of Jack Coughlin, from whom the "Partners" had bought their cattle. She must have arrived in Silver Peak quite early. I have a paper that said Jack paid taxes in 1918 for twenty-seven head of stock. She was there as long as I remember and died around 1960 in her nineties. She was small and slender with short white hair and a lively face. She always wore a baseball cap and a housecoat. When she went out of town, she would dress up in her jacket made out of her favorite pinto donkey and wear gardenia perfume. She had a quick and lively wit and wasn't fond of women and children but did enjoy men and animals. She claimed a small herd of donkeys that would winter in Silver Peak and go over the Silver Peak Range to Fish Lake Valley in the summer. She had rescued them at various times of their lives, and they would stop by her house occasionally and bray, and she would clean out their ears. In the back of her house she had a screened-in, two-room building in which she kept "wild canaries." Twice a year she went to San Francisco to have her fortune read, and I would take care of the birds plus whatever dogs or cats she might have. I heard she had been a horsewoman and rode sidesaddle. When the cattle were purchased, the brand was N-B, for Nellie Burns, her maiden name.

As there was no high school in Silver Peak, I stayed with my aunt and uncle, Carroll and Elsie Humphrey, in Tonopah for the school season. I went home to Silver Peak most weekends, sometimes taking the "stage." Marco Chiatovich had the mail contract to pick up the mail that traveled the main highway and take it to the Silver Peak post office. Some of the mail was picked up in Tonopah, so he would also fill grocery orders from people in 191

Silver Peak who needed supplies that Tonopah had. He would also take passengers. He had driven a freight stage during the horse and mule era so appeared well-suited for the job. He didn't drive much over thirty miles per hour, and when passed would mutter, "Damn fools, they'll be picking you up in a basket." Marco also owned and ran the gas station.

Stanley, Jack, Pat, and Bob Chiatovich were brothers and my older cousins. They and their families provided wonderful memories in my life. My dad always considered Stanley his best friend. He and his family lived kittycorner from my house. Their oldest daughter Janice was two years younger than me and was like my younger sister. She was my roommate for one year of high school and three years of college. Stanley, Frances, and their three daughters moved to Gabbs when Janice was a sophomore in high school. Marco was an uncle of the four brothers and lived in the adobe by Baba. He had his dinners with the Stanley Chiatovich family. Pat was someone we could all ask to help us. He would fix saddles and other cowboy tack so we would be safe when riding. He was very kind to everyone and everything.

Jack was a real cowboy and had been earning his living at it since he was a young boy. I've watched him ride bucking horses, and he was good. He was an outstanding judge of horses, sometimes choosing a young one that appeared to the rest of us as a bad choice, but time would prove him right. He was married to Gena, whose last name is now Palmer and lives in Las Vegas.

Sam and Flora Best were Native American (Paiute or Shoshone) who lived in Silver Peak most of the year but also spent time in Fish Lake Valley. They were raising their niece, Adeline, who was two years older than me and went through elementary school with me. She was very good at drawing, and we spent many hours playing with the paper dolls that she would draw. She also taught herself to play the piano and could play at school functions, both in Silver Peak and when she went to high school in Tonopah. Sam would come down and visit with my dad. Flora's sister Nellie was married to Oscar Gallagher, and they lived in town with their dog and a pet goose. Oscar would occasionally cowboy with my dad.

Fred Vollmar and his wife Lois lived a block down the street behind a high fence in a sort of compound. Fred's father had been an important mining figure in earlier Silver Peak days, and Fred was likewise successful in mining ventures. The Vollmars had a small living house, a game house, a guesthouse, and a pool. Lois was friendly and pretty. Fred was large, with a beautiful speaking voice and an intimidating presence. His sister, Johanna Cameron, lived next door to him. She had two adult children. Hugh Cameron, who was an early jet pilot, lived with his wife and two children in Silver Peak for awhile, probably in 1950. He was in Reno after that and died several years ago. Mary Frazzini, Johanna's daughter, lived in Reno. Her son spent some time in the summer with his grandmother in Silver Peak. Bob Chiatovich and Hugh were close in age and good friends.

Water was always a problem in Silver Peak. Despite the abundance of spring water in the reservoir and its runoff into the marsh, it wasn't available

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for town use. Everyone had their own wells, and it was either pumped or pulled with an old-fashioned bucket. The water was highly mineralized and not too good for drinking. We generally hauled drinking water from the Big Spring several miles out of town. Most of us raised in Silver Peak had very few dental cavities. My mother loved to garden, but it was a heartbreaking experience there. Our pump was too small, and the water seemed to burn many of the things she planted.

During most of my years in Silver Peak, there wasn't a grocery store. Tonopah was fifty miles and Bishop one hundred miles, so people had to plan ahead.

After high school I attended the University of Nevada, Reno but returned to Silver Peak in the summer and at vacation times. After marriage, I would travel to Silver Peak several times a year while my folks were living, giving my two young sons the chance to share my childhood home, and they always looked forward to the adventure.

But as time went by, the beautiful flat expanse of the salt flat was disfigured by huge evaporation ponds. The water level in the area dropped; and the marsh, where we skated in the winter and where migratory birds would stop in the spring and fall, atrophied and dried up. The reservoir is no longer a place where children can spend a summer afternoon in clear, cool water. The little spring on the edge of the salt flat east of town where cottonwoods grew (and watercress in their shade), where my young boys would find earthworms to fish for trout in Fish Lake Valley, and where our horses as well as the wild animals watered, dried up, became barren, and its existence is no longer detectable.

I still come back to The Peak every year to maintain the graves of my parents, my grandparents, and the Clearys. But it is not the town of my childhood, and we arrive in the cool of morning, clear the tumbleweed away from the graves, leave new flowers, pay our respects to Ruby Shirley Griffin, and leave.

Notes

1. Nevada, the Silver State, vol. 1 (Carson City: Western States Historical Publishers, Inc., 1970), 299.

2. Nevada, the Silver State, vol. 2 (Carson City: Western States Historical Publishers, Inc., 1970), 962.

3. Sue Humphrey Thompson, the author of the biographical section on Harvey Humphrey, is Humphrey's daughter.

4. October 1942, Order L-208 of the War Production Board closed nearly all gold mines and suspended gold milling operations. Gold production in Nevada dropped

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and occurred mostly as a by-product of copper. Strategic minerals needed for the war effort were still mined, so many miners moved to Gabbs where they mined manganese, brucite, and magnesite in 1944. The War Production Board Order L-208 was rescinded July 1, 1945. For more details, see Joseph Tingley et al., *Outline of Nevada Mining History* (Carson City: Nevada Bureau of Mines and Geology, 1993).

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5. A mask to keep miners from breathing dust.

PART III World War II and the Post-War Era, 1942-1990

World War II arrived, and Silver Peak's golden days ended with War Board Order L-208, which closed down almost every precious-metal mine nationwide. Only strategic minerals were needed for the war effort. That meant the E. L. Cord Mill, the Mary Mine, the Gordon-Brodie Mine and Mill, and small leases—all were shut down. Mining stopped and the mills fell silent.

Fred Vollmar Jr. moved away from Silver Peak and spent later years mining around Austin, Nevada. Meanwhile, various members of the Chiatovich, Shirley, and Humphrey family partnership left town to find work. Most "moseyed back as fast as they could," no doubt hoping the war would end quickly, returning gold and silver mining to its former level.<sup>1</sup>

Little did they know Silver Peak would never be the same. The cozy family town of the 1930s heyday had to change or die. After the war ended and restrictions were lifted, large-scale gold mining was still impossible due to material shortages and high costs. Local residents returned to prospecting and small mining operations, keeping the overhead low. Most of this work resembled a hobby and was conducted in spare time or on the weekends, although a few people made enough to pay their bills.

It wasn't until the 1960s that The Peak really came back to life, when the Foote Mineral Company arrived to extract lithium from the Clayton Valley playa. Its operation leveled out the peaks and valleys of a precious metals economy. However, the war years and the quiet years that followed took their toll on the town. Residents remembered the passing of the Vollmar era heyday.

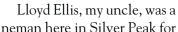
## ALBERTA MERRITT: JUST HERE TEMPORARILY

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War And Quiet Times. 1942-1970

Alberta Merritt is a native Nevadan, born in Fallon on July 24, 1929. She arrived in Silver Peak in July 1956, and her husband was determined that Silver Peak would be only a temporary home for the family. However, forty years later, in 1996, Alberta was still a vital part of the community. Originally, her husband worked at the power station then later owned a ranch. Once their daughters were old enough to attend school, Alberta returned to teaching, and she retired after nearly thirty years in 1985. She saw many changes in her hometown over the past forty years from her perspective as the schoolteacher.

My husband's brother, Dick, was working at the mill in Gabbs, and he was looking for a mill job, perhaps at Silver Peak. Dick asked my husband Nate if he would like to ride over with him, and Nate said, "Sure." When Nate got back to Peavine (Peavine Canyon in Big Smoky Valley) where we were living, he said, "Oh, that's the most desolate place. I'd never live there!"



Lloyd Ellis, my uncle, was a lineman here in Silver Peak for

Alberta Merritt. (Photograph by Victoria Ford.)

the California Electric Power Company out of Bishop, California. He would come to Peavine and go fishing every Sunday, and we would visit. He told Nate that there was a job opening here in Silver Peak for a transmission substation operator, and Nate got the job. Well, it wasn't too long after he had said he would never live here that here we were!

We came sometime in the last part of July 1956, during the worst thunderstorm and electrical storm that I've been in. The rain was pouring down, and we had a cattle truck and a pickup with the rack, all loaded with our furniture and our beds, and everything that we owned in the world was on those two trucks. We had the three girls. My youngest, Cheryl, was six months old. And so Leona had to be a year and a half, and Linda had to be four and a half or five.

Every time the lightening would hit a power pole or a power line, this big fire bell in our kitchen in this new, little house that we were moving into would ring and just about deafen us, because it was so loud. It was meant to be loud so that no matter where they were, they could hear it and know that they had to run into the substation yard and close the switches. Then everybody would have power. They used these long (they must have been ten feet or twelve feet) sticks with kind of a hook on them to close the switch. But if



they were tripped again by another lightening bolt or something was wrong someplace else, then they wouldn't hold, and he would have to call the main office and get troubleshooters and the lineman from other places to go out and fix whatever was wrong.

But that was really harrowing, because the lightening was hitting everywhere all around us, and the thunder was terrible, and it was pouring rain, just like a cloudburst hit right in this spot. And then later on in the afternoon, why, everything was calm and peaceful and cool and refreshing.

He worked there from 1956 until maybe 1973 or 1974, nearly twenty years. California Electric sold out to California Edison, I believe. And then California Edison sold it to Sierra Pacific Power, and then they updated their communication system. The only telephone in town was there at the substation at that time in 1956. People would have to go down and use the substation telephone, because no one else had any telephones.

Most everyone had oil stoves, but we had an electric kitchen stove for cooking. We didn't have any street lights, and everybody had their own little water system. We had running water but no drinking water. The water table here was quite high, and it wasn't really fit. It tasted terrible—smelled worse, you know. And Saturday was the water day, because everyone got their water from the big spring up there about ten or twelve miles away. And if Nate was on duty, he'd go around with the power company truck and gather everybody's containers—gallon jugs and barrels—for us and for some of the older people who maybe couldn't get it. He always got water for me for the school, because I had to fill up this ten-gallon barrel of water.

When Nate went, then we all went and climbed the hills and splashed in the water and washed the . . . What was the little pond that was there? And, oh, pick water cress and bring it home and have watercress sandwiches. It was fun.

The first house had a little porch, just a little porch as long as the kitchen. I imagine the kitchen might have been ten by twelve, something like that. There was always a front door and a back door opposite of each other, so it always created a nice breeze, because it does get hot here in the summertime. Then there was the kitchen, and right off that was supposedly a living room. Because we had three children, we turned that living room into a living room and a bedroom for my husband and myself. And in the other room beside it, we had a set of bunk beds and a single bed for the three girls. When Cheryl was just a baby yet, there was a closet. It didn't have any doors on it, and her crib just fit in this closet. So that's where we put her crib, and that's where she slept. And then right off of that bedroom was a little bath and a closet, and that was it.

We didn't have a garden here: we would always have to travel to buy groceries. We would usually go to Hawthorne, because at that time the Big T Market was there, and you could buy groceries real reasonably. We felt that Tonopah prices were really quite high. We would buy cases of canned goods. Our grocery bill might be like \$125, but the whole floor of our pickup

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War And Quiet Times, 1942-1970 would be full of cases of goods and sacks, and that would usually last us for about a month. I would bake bread and make jam, and if we had any food or if I could find any food, I would always can it.

Spiegel's and Alden's and Montgomery Ward's and Sears's—and I don't know if we had a Penney's catalog, because when we first came here, Spiegel's catalog had the cheapest clothes. Just before school started, I'd outfit my three girls from the Spiegel's catalog. But then about ten years later, the prices skyrocketed, and a six-dollar dress would be probably sixty-six. I liked Sears because their quality was better than Ward's. Things were shipped directly to the post office. Sometimes I shopped in Tonopah but not very often. And then there was a little dress shop, Fidel's in Hawthorne, where I bought my kids' clothes when they started in high school. They were nice, nice clothes. They always said, "Those Merritt girls, they look like they just stepped out of a band box." They did. They looked pretty.

We were both raised on ranches and farms, so we knew what to do .... We bought the old Chiatovich ranch in Fish Lake Valley. It was just a big pasture, and we had the grandfather rights to the water from Fish Lake itself. To get started he bought milk cows. Eventually, we had five milk cows with two or three calves on each cow. And we had one little old Guernsey cow ... and we called her June. That was the start of our herd, June and her calves. Then we would go to Yerington ,or wherever anybody had calves to sell, and bring them home. One time when he went to Yerington, he took out the back seat of the car, and here he brought three little calves home in the back seat of the car. [laughter]

It was just a happy, happy time. Nate and I had always been out in the hills, in the desert and isolated, and I didn't mind it. In fact, this is down-town for me now—living here in Silver Peak.

# Silver Peak's Teacher

I think I started subbing [substitute teaching] around the county here in 1961... all grades.... [We had] probably twelve or thirteen children here. There were not very many, but there was one in every grade. I loved it so. It was so much fun to go decorate my room and get all these neat things to talk about and have for the kids to look at and write about. I just had fun with the kids.

There was the building [which later was remodeled and became the Vinegaroon Saloon] and a teacherage. Then the Mohawk Mine opened in the 1960s, and suddenly we had thirty-one [students], more or less, in all eight grades. Lydia Baird from Goldfield came and took the upper grades, and then I had the first four grades. She stayed at the teacherage.

Whenever the mines closed down, then our population went down. But we always maintained enough [to keep a school open in Silver Peak]. Well, by that time Foote Mineral Company had come in, in 1961, then the fami-

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War And Quiet Times, 1942-1970 lies started coming in from Big Bear. That kept our school population up, and we could maintain a two-teacher school. If we had more, then maybe we might have an aide to help us. But sometimes if we didn't have an aide, I would take some of the upper-grade students that were finished with their work and wanted to come into my room (they loved to come into my room), and I would have them listen to somebody read or have them watch somebody do something—you know, just to help me out and help the students out, too. But when you have all four grades in the lower grades, somebody is getting neglected. And I hated to have that happen, but it just happens.

#### School Discipline

It seemed like at first there wasn't much discipline to be done in 1961. I had all eight grades, and it just seemed like things went along. The children were respectful. They were not troublesome: that wasn't until the later years (in the late-1970s), when the whole school system was changing, and the children were running the classrooms, and the teachers did not have control. I know there was one seventh grade boy, he was taller than me. I got so disgusted with him, because he could do the work, but he wouldn't do it. He thought he couldn't. He either sassed me or made some flip comment, and I took his desk with him in it, and I just shook him all around that room. I was so upset. Well, that's all it took. And then I didn't have any more problems. [laughter]

I would talk to them and tell them, "I am so upset with you, because you do have the capabilities, and you mustn't ever think you can't." And I just would try to build them up. Then it seemed like we were on better footing. I always figured if you got the Indian sign on, why, they're not going to push you. Indian sign means they are leery; they are not going to push you, because they don't know what might happen. Not that I would do anything, but they didn't know that, so that was a good way.

If a child was misbehaving or annoying someone else, disturbing someone else, I would go whisper in their ear and ask them not to, and tell them that they needed to get their work finished. It was not right for them to disturb anyone else. And, of course, they would all want to know what I said. Then I would go whisper in their ear, "If I wanted you to know, I would have said it out loud." So I just kept them guessing. Or if somebody asked, I just pretended I didn't hear them.

Sometimes if they were goofing around, you know, flipping their erasers and peeling it off or poking at somebody else, why, I would walk up. They wouldn't even see me coming. I used a yardstick a lot to point on the chalkboard, because the rooms were large, and for some of those kids, it was hard for them to see. I would slam it on their desk or on the side of their desk, make a big bang, and they would jump up. I'd get their attention for sure, and I wouldn't have to say anything. If everybody else was busy, they would look around and say, "What happened? What happened?" And I would pre-

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tend I didn't even hear. We just went on. But that's all I had to do to get them back to what they were supposed to be doing rather than messing around, and I was letting them know it could have been worse.

I would slap a yardstick down on their desk, and sometimes it would break and I would just say, "Too bad your hand wasn't there." Especially, if they were really being obnoxious or bothersome to anyone else, because I would not allow them to interfere with anyone else who was trying to learn.

So I didn't spank them, but I'd slap that yardstick on their desk and roll it along the sides, and then everything changed. Well, I would never have done that, but they didn't know that. They thought I might. And they always said, "Well, we know when Mrs. Merritt's mad from the way she walks." I didn't stomp, I just walked fast, and I always wore heels. I always dressed up, and I had my jewelry and heels and hose and everything. But I walked fast. And boy, they knew if they heard me walking fast, that they better watch their p's and q's. And then they really shaped up. Usually, it took a long time [for me to get mad], but I wouldn't put up with much.

It may not have set right with the parents, and they would come in, but before they left we were in agreement and perfectly calm and contented and satisfied with whatever was happening in the school. But towards the last year or maybe two years before I retired, my methods must have been outdated, because they didn't work anymore. The parents were really concerned about their children, but they wanted to be able to discipline them from home, which I could see—that they should teach their children at home how to behave someplace else, out in the public or in the school.

But it was very hard for me. As we kept getting closer to the 1980s, it was just getting worse. And the parents, they supported the school. They really did. But some of them would come, especially if I got after their child in school and the child went home and didn't tell the whole story but told his side of it, you know. Then the parent would come storming into my room just really raising a lot of noise and yelling. I would just sit and listen until he was through saying whatever he had on his (or her) mind, and I would say, "Well, this is true, but this is why this is true." And I would explain my philosophy of it, and when they left we were good friends, and I didn't have any more trouble with the child.

I would tell them, "I will take care of your child at school; you just take care of them at home. And I won't believe half of anything that they tell me that happened at home, if you won't believe half of anything they think happened at school. And we'll get along fine." And we did, and it worked fine.

It seemed like in the families with the higher positions, management positions, the children felt they were freer to do whatever they chose to do within a classroom, regardless of inconvenience to anyone else. And I did not approve of that attitude. Those children knew that they would probably get into trouble at home, so I don't know why they felt that they had to prove something in the classroom, but it was the management's children

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that did that more often than not. Well, one time I didn't call their mom, I called their dad at work. And it was the boss's son—one of the bosses at the mine. And his little boy was intelligent. After that his mom came to school every day to see that he got his work done.

Of course, there would be some children that were having family problems at home, and they would be disruptive and ornery. But it wasn't quite the same. This was more an attitude of, "I can kind of do what I want to here, because my dad's the boss." And it's not a bad attitude, but children really don't know where to use it. Then the other kids don't like them. So naturally, if they don't like somebody, they're going to do mean little things, underhanded. Then, of course, that child has a right to be upset, and he has a right to get even. But I told them, if you want to fight, go past the gate after school and give it to him. [laughter] We didn't allow fighting on the playground. Any type of confrontation we had to settle, I tried to show that there are other ways of settling a dispute than fighting. But there were times when someone just needed to knock a bully for a loop. We had a superintendent-when kids would get in a fight, he brought out the boxing gloves. And I'll tell you, that stopped them. They took a few fisticuffs, and they found out. And most of the time if you confront a bully, he'll back off and turn and run.

The management people were considerate, kind, thoughtful, and they would be appalled if they thought their children were behaving in this manner. They would certainly not approve of it. And I'm sure that they did want to know, and they should know, because then they could talk to their children and explain that you don't act like a lord over someone else, because you won't have any friends if that happens.

Right offhand, I can't think of any boy that was a jolly old fellow where everybody really liked him whose father was in management. I think it showed up in the boys more than the girls.

## School was Fun

Usually, we did a lot of fun things. We had aquariums and hamsters, and if they wanted to bring a frog or lizard or a snake, why, we'd have them. Whenever I went to Bishop or during summer school (I had to go quite a lot to keep my credits up), I went to the teacher's store. I would get so many neat ideas to bring home from the college, and when I was going to summer school I would go to all of these different departments to see what they were doing.

One year we decided to have a newspaper. This is when we had all eight grades. And I said, "You have to think of a name for this newspaper. We're going to sell it for ten cents a piece. And with the money that we've collected, we're going to order from the Tandy Leather catalog, and then you can all pick out something that you want to make for your moms for Christmas." 203

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One little girl, she named it "The Peek of the Week" (with evelashes on the 'ee's). Everybody had to write an article. We divided our classrooms—some to be editors, some to critique it. We gave everyone a job that would be at a newspaper. Spelling and grammar and complete sentences—I used it like a language assignment. Then I would type it up, but I would not use my ribbon; I would just type it on a carbon for one of these mimeograph machines. I would type it on mimeograph paper that was purple on one side, and then it had this fluid, and I would run it through with a crank, and then it would print off. And right after school the kids would take their papers, and they would be sold in no time. Everybody bought a paper.



Alberta Merritt on the schoolhouse steps in 1996. (Photograph by Victoria Ford.)

We had back-to-school night. We always had open house after we had something to show them. And then we would always have Halloween parties and birthday parties and a Valentine's Day party. We always observed the holidays. At Christmastime we'd always put on a big production, and everybody had something to say, or maybe two or three things to say. We had plays, and I liked to do shadow plays behind a big sheet.

Lydia and I had more fun doing those Christmas programs. We made three snowmen. I had three big wire hoops and three big rolls of cotton. I sewed all this cotton on a bed sheet and made these three big snowmen. But the thing was, it was narrow at the feet, and one of the snowmen fell down. It was my nephew, and we couldn't get him up. He couldn't get his feet apart, because the ball had to come around close to his ankles and legs.

#### Health and Counseling

Usually, if a child was were really sick and no one was home, I think we had a cot. I'd just kind of isolate them and make sure they were warm. I couldn't give them any aspirin or any medication unless I had written permission. If they had chicken pox or whatever, then they didn't come to school. But by that time, everybody else was exposed. (I had the measles three times, but I never had anything else.) The only accident that I had to deal with was when we got the merrygo-round. I had it taken out, finally. I didn't want a merry-go-round, but the school board decided the children should have a merry-go-round. Anyway, this girl was standing up in the middle—and this was against the rules—and there were all these kids around. She was fifth grade, sixth grade maybe, and she wasn't prepared, so she fell off and broke one of her front teeth off. We rushed her into the . . . by that time we had a lunch room and put ice on it.

And I told the kids, "We have to find that tooth." And I said, "It's going to just look like this little rock here. It will be covered with dirt. It won't be white." And we searched, and we found that tooth. Then we stuck it in milk, and we stuck it in her mouth. They went to the dentist and saved her tooth, but they had to put a cap on it. But that was the most dramatic injury during the whole time.

In the later years I did notice signs of child abuse and family problems. Maybe I didn't know enough to notice it earlier, but there were a couple of instances. This one little girl, she was like sixth or seventh grade, she turned her parents in [for child abuse].

But there was this little boy who was . . . oh, he was so cute. Cute little kid. And he didn't talk much or anything. He'd have these scratches or something on him. I'd ask him how he did it. Well, he did something. And then he came to school smelling like diesel, and his little shirt and undershirt was soaked with diesel fuel. Well, that just burns and stings your skin something terrible. So when he got there, I took those shirts off him, and I washed his little back off with soap and water and tried to get that stuff off and washed out his clothes. Then I think I sent somebody home to get a shirt or something for him, so he'd have some clothes until it dried.

I wanted to turn his folks in. I had kept asking around, but nobody would say anything. See, they were afraid to say anything for fear the parents or the father would do something, because they were working at Coaldale, and he came from Coaldale. Well, then I think maybe the health nurse might have gone out there. Then they left. They just took off.

#### Retirement

I was glad to retire. By 1985 I hated to get up and go to school. It was not the same job. The classroom was chaos most of the time. I did not have control. I was always after somebody all of the time. I couldn't teach anybody anything, and that was my job and my responsibility. I took that to heart, and it just aggravated me that these children would not adhere to our classroom rules. They would be disrupting me, and they would be disrupting other kids. It was just terrible, and I hated it.

It started changing closer to the end of the 1970s, beginning of the 1980s. By then I had twenty-eight years, and I really should have gone two more years [before retirement], but I could not face the thought of two more years 205

of that. I felt that it was going to be like that and worse. I felt I had a good reputation as a teacher, and I didn't want to blow it, because I might have taken one of those little kids and turned him over my knee and really gave it to him.

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In the meantime, my husband passed away in 1983. I had the ranch. I had the mine. I had my house, and we had a house in Mina. Nate had eight mining properties. They weren't working mines, but we had to get the assessment work done, and we had to file the papers. We had to do this with BLM, and we had to put up something or other. All these extra things, it may not have been that much, but I felt that it was.

They had a retirement party for me. They had it at the community center, and I got a plaque and a ten-ounce bar of silver. Delta Kappa Gamma ladies came from Tonopah, because I belonged to Delta Kappa Gamma, a teacher's society. The kids at school all made a block for a quilt and drew their picture and signed their names; and Cleo Hansen, an aide, finished making the quilt. It is beautiful; I treasure it.

## Women's Work

The only woman working that I can recall would be Ruby Shirley, and at the time she was postmistress. There just weren't any other jobs available for anybody to even apply for. Some of the women here might have worked as waitresses at Coaldale. During the 1950s, there just wasn't anything going here.

I think it was just because there were no jobs. I don't know of any woman that actually worked in a mine. Now in the mill and lab, I'm sure they did. It seems to me there's the old thought that a woman is bad luck in a mine. The miners don't want to have the women in the mine. And it's just an old, old thought that's been around forever, I think. I'll bet there weren't any women working underground at the Mary Mine. I'll bet not. I don't think so. I've never heard of any, and I'm sure I would have heard, because I'm sure it would have been an uproar. [laughter]

Then I think probably in the middle 1960s, whenever Foote Mineral started up, then there were women in the office. Then women were out on the lake doing whatever work was required out there, right along with the men. So that was about . . . I would say mid-1960s and early-1970s. Then, when Sunshine Mining Company came, women could apply for a job any-where—whatever was available—out on the lands and in the cleaning and cooking, bookkeeping, office work. Women would clean houses for the miners, or they had a bunkhouse down here, and there was a lady, Sally, who would cook for them and kept the place clean. I don't know whether she did their laundry or not. She may have. I had several friends that worked in the office up at Nivloc at the Sunshine Mill.

And then someone would remark, "Well, now, who does she think she is, getting out there? You know, she can't do that work." Well, she *could* do that work. Remarks were made that women were more efficient with their hands and had more foresight than some of the others, so I was quite proud of them. They were doing men's jobs successfully and sometimes even better. I thought, "Good for her."

My husband wouldn't let me start working until the children started to school, which was fine with me. Cheryl, my youngest, was in second grade when I started teaching here. When she started to school, then I would sub around the county. Every Friday I would go to Goldfield. Anne Tomany was the elementary teacher, but she was also County Coordinator, because we didn't have superintendents in those days here or county superintendents for school boards. So I would take her classroom while she did all of the office work.

#### Women's Groups

Usually every Sunday we'd have a potluck, and we'd go out to Coyote Knolls, because it's flat on top and the kids could run. Then at Christmastime everybody would have open house, and people would come and have a drink or coffee. And then they'd leave and go to somebody else's house, and pretty soon we'd leave and go to somebody else's house. We just made the rounds, but it was just up and down this street—that was all the people that were here. There was Ernie and Ruby Shirley, Harvey and Virginia Humphrey, Louie and Jean Marie Shirley, and Johanna Cameron.

Later on, when Foote Mineral started, then they [women] would meet. I don't know as we really had a name for it, but we would meet maybe for a crafts thing. Whatever you were working on you could take there, and we would just meet and visit and whatnot at the community hall. We started to make a quilt, and everybody had to make their block. But I don't know what happened to that, because I think it disbanded.

When my girls were little, I went to Fish Lake Valley to take them to 4-H meetings. Because I was their mother and their teacher, I didn't want to be their 4-H leader, their Girl Scout leader, and all of that, too.

There's always been someone every once in a while in town that would say, "Why don't we do this?" And one of my friends—Bonnie Burton, who is deceased now—had an aerobics class. And, boy, every Tuesday night, we'd be there doing these exercises. We'd do it at her house, or they'd come to my house. And we'd stretch, and we'd do the bars. It was just a regular thing.

We had a pinochle club. There were eight people, and we took turns going to their house. We'd have two card tables, and we'd play partners. It would be my turn to have refreshments or snacks at my house. We had first prize and booby prizes, and it was fun. It was just a get-together of people who liked to play cards. And then it just got to the point where, well, Bonnie got really sick, so . . . .

We had swimming classes, but I had knee surgery on both knees (not in the same year). I would go down at nine in the morning and swim for an

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hour before the children came and did my water aerobics in there. Then Bonnie said, "Well, maybe we can get together," because she had taught water aerobics in California. Then she'd go down at nine o'clock, and we'd all do these water exercises for an hour, and we did that for a long time.

We've always had something going, something doing. I've heard people say, "Oh, I can't stand to live here! There's nothing to do!" Well, the thing is, you have to make something to do.

I belong to Beta Eta; it's Beta Sigma Phi, and our chapter is Nevada Beta Eta. It started with some of the young mothers. I think this is our fifth year. At that time this group started, I was still quite involved in Delta Kappa Gamma, but I had to go to either Hawthorne or Tonopah to their meetings. Beta Eta meetings would be here in Silver Peak, and I thought, "Well, I can stay home and still go out."

I didn't help start it (Delta Kappa Gamma) but I was invited to join in Tonopah. I held chapter offices and a state office as personal growth chairman. I was the president in our chapter and recording secretary and treasurer for at least ten years, besides on committees. There weren't enough of us to each have a chairman of a committee. You're just a committee, and you probably had your name on three or four, because we all had to work together. And that's how it is with Beta Eta, too; we don't have that many members now, so everybody's on a committee. If we had a bake sale or a car wash or a yard sale, why, everybody pitched in and did everything anyway.

When I retired, Anne Tomany, who was my friend and mentor, said, "Get out of Silver Peak. Don't stay there." But then she died two years after Nate did. Where would I go? I've been here since 1956. That's forty years now. And all of my friends are here. And I know if I needed anything at all, everybody would come, and I would do the same for them.

I wanted to put on my gravestone up there, "Here lies Alberta. She was here temporarily." [laughter]



## DENNIS GADDY SR.: FOOTE MINERAL COMPANY

Silver Peak survived the 1960s in part due to Foote Mineral Company (Cyprus Amax Minerals since 1988). The chemical process to extract lithium from the underground water of the Clayton Valley playa has offered steady employment for about thirty years. Production Superintendent Dennis Gaddy Sr. watched the community change over the past twenty-five years while serving as both volunteer fireman and deputy sheriff. Gaddy's oral history also addressed changes at work due to environmental regulations that began in the 1970s and 1980s.

In 1971 I had the opportunity to take a job here with, at that time, Foote Mineral Company, and I moved out from southern California. We



Dennis Gaddy Sr. (Photograph by Victoria Ford.)

had made arrangements a few months ahead and rented a small house for, I think, about six weeks until we bought a mobile home to live in. The house was very old. In fact, Harvey Humphrey owned it at the time [across from where he lived], and he had installed an indoor bathroom for us before we moved in. Two rooms, basically, with an enclosed porch that served as a second bedroom and a living room-kitchen, kind of a combination.

There were about a hundred people in town, and, actually, our reception was great. In a small-

town atmosphere, everybody gets involved. Probably the first week of work I was asked to join the fire department and the Sportsmen's Club—hunters, basically.

Fire fighting at that time was Charlie Pearson. He had an old Studebaker truck with some hose on it that you could hook to the hydrants, and that was it. There was a volunteer fire department, and I joined sometime during 1971, and I've been active with the department ever since.

There was one bar in town, the Shifting Sands, which was owned by Jim and Marie Gavin . . . . Harvey sold gas. You had to go get him. The post office, of course, was here and the school. That's about it. Parsons Construction, which at that time he worked almost exclusively for Foote.

Foote supplied water basically for the whole town. Sewage was by septic tank, pretty much the way it is now. Silver Peak didn't have a library at that time. The building that it's in now has just been here a few years. But there was an older mobile home that the company donated and was the library building years before.

TV—when we first came, there was one station. There was one translator. I believe it was KOLO out of Reno. There's a translator to the southwest of Silver Peak on a mountaintop. And then I don't remember which winter... if it was 1971 or 1972, but the generator burned up. So we were without TV for awhile. There was a TV district, and they got a bank loan to rebuild that translator and put in two more. Just about everybody from town went out and helped put up the buildings. We had three stations at that time, all out of Reno.

When we came here we found a home, and in twenty-five years the town has grown. We were over five hundred at one point when Sunshine was building up—mid-1980s, I believe, and then just recently down to two hundred or so. Sunshine Mining Company, when they started the mine up, 209

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they provided a lot of housing. All of their employees were offered the apartments that were up on the north side of town, available to rent. They also had a program where they would help purchase mobile homes. What Foote has always done, and still does, is provide the trailer court. There is no charge and the utilities are at the same rate the company pays. That is just for employees and is located just to the south of the mill building right across the street.

My mother-in-law Pat Reed started a store, a little grocery store for bread and milk and that sort of thing. At one time we had three bars. The Shifting Sands, and then the Vinegaroon—I forget what it was called at that time. It's been several different things over the years. The schoolhouse was turned into a bar-restaurant-type thing. And then the other one was out at the north end of town. It was called the Dead Coon Saloon, and it's now been purchased and turned into a residence.

## Foote Mineral

The company actually started here in about 1964, and its first production was about 1966 as Foote Mineral. I started as a laborer, and the operation is the same as it has been over the years. It was smaller.

We start with subsurface brines from the playa that contain lithium. We pump it to the surface, and it's just like water wells. The brine stays in the ponds for approximately a year, and then we have an operation out there called liming, and we add lime to the brine to precipitate magnesium. It takes about another year for it to get up to the strength for the plant, and we bring it into the plant and, essentially, just precipitate the lithium out of this



Early view of the playa before Foote Mineral operations began. (Photograph courtesy of Barbara Dodgion.)

as carbonate. The evaporation leaves salts. The most abundant salt is sodium chloride—table salt. As it gets more concentrated, it starts to leave some potassium salts. Magnesium we have to remove, because it would precipitate as carbonate and be an impurity in our product. What we are left with is lithium chloride in solution with sodium and potassium chlorides.

Lithium carbonate is the base chemical for all other lithium chemicals. Here, now, with the new plant, we take lithium carbonate and process it and turn it into lithium hydroxide. Foote has other plants in the East that take lithium carbonate and make lithium bromide and lithium chloride, lithium sulfate, lithium fluoride. Lithium carbonate is used in glass and ceramics as a flux. The aluminum industry uses a lot of it as an enhancer in certain types of processes to increase electrical efficiency in pots. Lithium chloride is used to produce lithium metal, and it's processed similar to chlor-alkali. And lithium metal, of course, is used in batteries and alloyed with aluminum for aircraft—special alloys and things. Lithium fluoride is used in welding rod fluxes, that sort of thing. Several lithium compounds are used in pharmaceuticals. Lithium carbonate is used in the treatment of manic depressives. This product that we make here is not pharmaceutical grade. It gets reprocessed, actually, goes through hydroxide and back to carbonate to get a pharmaceutical grade.

We produce lithium carbonate both here and on the SCL plant in South America in Chile. Some of that is sold directly to customers. Some of the bigger ones are Alcan, PPG [Pittsburgh Plate Glass], and Chemettall Gesellschaft, which is German. It's used in glass, ceramics, aluminum production, aluminum alloys, and pharmaceuticals. What is indicated here [referring to a flow chart] as Sunbright, that plant has been closed and relocated to Silver Peak, so here we also produce lithium hydroxide monohydrate, which is used in greases and other chemicals. And we also produce lithium hydroxide anhydrous, which is used in life-support systems. And the biggest customer there, of course, is NASA and Boeing. It's used as a  $CO_2$  absorbent in spacecraft and submarines.

Now we actually have our metal toll produced from lithium chloride by DuPont. And then it goes to King's Mountain, North Carolina. Lithium bromide is produced from carbonate by reaction with hydrobromic acid. And the customers there are Trane and Carrier, and it's used in air conditioning. It's a dehumidifier that absorbs water very rapidly. Lithium chloride brine has, actually, the same use in air conditioning, and it's also used in photo chemicals and industrial drying. Lithium fluoride is used primarily in welding-rod coatings. High purity lithium carbonate is used in pharmaceuticals. And specialty lithium chemicals, we have several that are very small quantities. Then we have a metal-casting department, and there's two different grades of metal that we produce. What's produced for battery use has to be ultra pure. And then what's used in other alloys and things is a little lower purity. But we produce metal foil for batteries for Eveready, Duracell, et cetera. Batteries are for military and consumer and biomedical. We have a little 211

plant in New Johnsonville, Tennessee, that does organics, and we make normal and secondary butyllithiums which are primarily for pharmaceuticals.

So, our production levels go up and down based on world demand. The world demand is growing at a fairly steady rate. When we built the plant in Chile, it has a higher capacity than this one and also a little lower cost, so it tends to operate as much as possible. And then this is the swing plant, so we do go up and down. The world market affects this industry more so maybe than just the national market. Right now there really are only two suppliers of lithium chemicals in the free world, and that is us and FMC [Food Machinery Corporation]. They have an open-pit, hard-rock operation in Bessemer City, North Carolina. We produce a few pounds more, a few pounds less, but we don't typically lay people off. It stays pretty steady. There were about forty, maybe forty-five employees when I came here, and today it is right at seventy-five or seventy-six.

## **Environmental Issues**

In the 1960s, the environmental regulation was a lot less. Now we do have to have water pollution control permits, air quality operating permits. We don't generate any hazardous wastes, but we still have to track our waste to demonstrate that they're not hazardous—all of the same things you'd have to do if you were in Los Angeles or anywhere else. Basically, it's all federal law.

We have the sand dunes [in the valley], and they move back and forth almost across the valley. Anytime you get high winds, you get a lot of dust and visibility gets poor. But that's going to happen whether we're here or not. Actually, it would probably be worse if we weren't here, because we have a lot of the area in the valley covered with liquid.

In the past our operation affected the water table. In the early years, they essentially pumped everything they could. Over the last ten or twelve years we have stabilized, so basically we don't pump any more out of the ground than Mother Nature puts back in.

The waters of this valley are not potable and cannot be made potable, because the naturally occurring TDS [total dissolved solids] is over 100,000 parts per million. Actually, in our water pollution control permit, the state granted us an exemption on the water to the valley. We still, of course, are not allowed to spill hazardous things or contaminate, but basically everything that goes out there from this plant is the same thing that comes in. We change the ratios of the chemicals a little bit, but that's about all.

The county now has their own well, and they supply drinking water for the town. We do still supply water for our own trailer court, and we do maintain our permit as a public water supplier. When Foote arrived there was a water system, but I understand the water was not potable. Most of the residents, or virtually all of the residents, were hauling water from the springs.

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When the company drilled their fresh-water well, the quality was good and the volume was fine, so they just tied in a line from the company's waterstorage tank to the town's water-storage tank and supplied the water.

From the wells, the town's water meets all of the national standards and the state standards. What we've done is gone up on the alluvial fan a ways, and the wells, both of them, are about two and a half miles out of town to the south. When you go up on the alluvial fan, what you get is a recharge aquifer that's coming down from Fish Lake Valley, and it's fresh water. Our water meets all of the standards. It's just a matter of personal taste. Well, the TDS are a little over five hundred parts per million, I believe. The national standard is at five hundred parts per million. We're probably at six, but nowhere in the state of Nevada is under five, so the state has [been] varied to, I think, 750 is allowable.

In the 1960s and early-1970s, there was very little regulation, almost none. In the last ten to fifteen years there has been a lot of federal legislation which comes down to the state. As long as I can remember, we've had airquality permits. We never had to have a water pollution control permit until, actually, during 1975 or so. We got what they call an NPDES [National Pollution Discharge Elimination Systems] permit which is really not applicable to Nevada, because it's for navigable water. But it was the closest thing that you could get to meet federal requirements.

Then in the 1980s, with all of the changes that were going on in environmental legislation, the state started a water-pollution control permit program. And what you have to do is send in a permit application, which in our case was about that thick—about a ream of paper. And that's just providing them with enough information to make a decision on whether you should be operating or not.

I worked in the plant as an operator for probably two and a half or three years. Then I went into the laboratory as a technician. I was senior chemist, and I was technical engineer for a while, then plant chemist. Actually, just about four years ago I moved back into the production side and took over as production superintendent, but the permitting function has followed me through several jobs. I've had it since I was the senior chemist in technical engineering.

The resource [lithium] is not infinite. When I started, they told me we had about twenty years. We're still saying we have about twenty years. Well, if you're mining hard rock, you go out and drill a hole, and you sample, and you can block out the ore, and you know exactly what you have. What we have here is a fluid and it moves. So we use some statistical analysis to determine what our reserves are. That changes based on several factors, one of which is that the more we pump, the total amount of lithium in the brine decreases—the parts per million in the brine decreases. So you just take an arbitrary number and say that's an economic lower limit. And then you project when you're going to hit that number, and it depends on production rates.

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The lower the production rate we have, actually, the longer the property will last. The best projection we can do is anywhere from twenty to thirtysix years, because it's a statistical projection.

Somebody has to continually update the operating plan and follow regulations [for reclamation when the plant closes]. We do know what their requirements are for closing water wells, which essentially is what we have. And we're accruing for that now. We have to actually fill the column of the well with mud and cement, you know, bentonite clays and cement to prevent leakage and that sort of thing.

We have to drill new wells every few years, because the geology of the basin, it's fairly fluid. It's all alluvium. You get some movement, and you shear off wells, or you collapse a casing. And so wells have to be replaced. I think over the life of the property right now, we drill more than three hundred holes out there. We don't operate usually more than forty at a time.

#### Helping Hand

The swimming pool in town now actually belongs to Foote Mineral-Cyprus. We built the pool. In the mid-1970s the management actually polled the town and said, "What would you like to have? There's nothing for the kids to do here, especially in the summertime." They asked not just employees, but everybody in town, and the swimming pool at that time was the big winner. So the company did build a pool and has kept it open for the whole town.

Every year they contribute a good deal of money to emergency services the ambulance, fire department. In the 1970s the state started the EMT program, and the county bought a new ambulance in 1973. My wife and I were EMT's—not the first year, but about the second or third year of the program. That has continued and expanded to where we now have some of the capabilities very similar to what you have in big cities with paramedic crews. Our ambulance people now can start IV's. They just got defibrillators, or are just in the process of getting the defibrillation equipment. We now have two ambulances in town fully equipped.

And improvements in the fire department . . . . Again somewhere in the late-1970s we got a federal fire truck that was surplus from the navy, off of one of the bases. We used that up until about a year and a half ago, then we had a fire truck custom-built in Tonopah. We have a new firehouse, because the new truck would not fit in the old house. We just found out last week that we've got another fire truck coming. We bid on a surplus truck from California. We got it: it'll be here in a couple of weeks. We hope to start the fire rescue part, highway response to accidents, and that sort of thing.

The company, in cooperation with the county, the local emergency planning committee, has formed a Hazmat response team and a rescue team, basically, because federal law (OSHA) says if the county can't provide res-

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cue from confined space and certain other things that the company must. Obviously, the county can't afford the equipment that's required, so we've formed this cooperative, and it's working quite well. We've got about ten people now who are trained for Hazmat technician-level response. We've got about twelve or fourteen people that are rope-rescue trained, rappelling and that sort of thing. And the next step is the actual confined-space rescue training, and that's happening within the next few months.

I was an EMT instructor up until 1981, and then I quit. My wife still is. She's one of the co-directors for emergency medical services for the county and coordinator for the Silver Peak ambulance. I am still involved with the fire department. I'm training officer, and I'm also a part-time deputy sheriff, so that's plenty to keep me busy. [laughter] The times that we've had some problems have been when there were a lot of construction workers staying in town, and then you get the bar fights in the evenings and that sort of thing.

The fire department—we probably average about one or two calls a year. Biggest problem we have is keeping the training active so that when you do get a call, people know what they're doing. The sheriff's office—I probably average a hundred hours a year, seventy-five to a hundred hours a year. It's usually for accidents and things like that. Ambulance calls probably average twenty a year. A lot of those are motor vehicle accidents on the highway. We cover halfway to Mina and halfway to Tonopah, halfway to Goldfield this way and halfway... there's a halfway point with Fish Lake Valley out Highway 6 towards Bishop.

Well, when you have a total population of five hundred people and half of the jobs are with one company and half with another, that's really all there is. And the county is not a rich county. They don't have a lot of money for parks and things like that. Most of that comes from donations from the companies.

## SHERRY MATTEI: CHILDHOOD DEATHS

Sherry (Boyd) Mattei, granddaughter to Anna "Baba" Shirley, is related to almost every prominent Silver Peak family including the Clearys, Shirleys, and Chiatoviches. Between 1968 and 1976 Sherry returned to Silver Peak where she lived with Anna and worked for Foote Mineral. She listened to her grandmother's stories of the old days and learned how Anna coped with the deaths of her young children. Meanwhile, an avid horsewoman, Sherry rode throughout the area, observed changes as artifacts were removed, gravestones destroyed, and crime increased. For the first time, residents began locking their doors.

My grandmother was Anna Shirley, who was married to John Shirley. John originally was from Virginia. He came out West when he was about

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eighteen with a brother. And then Anna, her family moved from Bodie where she was born. Originally, they moved to Blair. She was a Cleary. Her father worked at the Mary Mine and had several of the livery stables. Her mother was born in Aurora, and then they moved to Silver Peak.

One of the daughters, Ethel, married Hank Gilbert, and another one, Virginia, married Harvey Humphrey. And Harvey and Hank were cousins, who then also became brothers-inlaw. And my grandmother's sister, Nellie Cleary, married Martin Chiatovich. So that was the Chiatovich relationship. [Among



Sherry Mattei. (Photograph by Victoria Ford.)

Anna's other children] there was Louis Shirley; Ernie Shirley, who married Ruby, the postmaster; and Ada Louise and Cora both died when they were two or younger. Anna had five miscarriages, and then there was my mother, Jane Shirley. My mother married Gene Boyd.

Quite a few of Anna's children were deceased or died when they were one or two. My grandmother said losing her babies was worse than knowing that she was going to die. She said there was nothing worse than losing a child. She also lost a lot of her other family members when they were young her brothers. Her sister died in childbirth when she was in her twenties, the one that was married to Martin Chiatovich. And all of their deaths were pretty terrible deaths. Most of it was due to long, prolonged illnesses. A lot of polio epidemics, hepatitis. My mother was very ill, and she was the youngest child and not supposed to live.

By that time my grandmother pretty much had my Aunt Ethel (the oldest, eighteen when she was raising my mother) raising the children. Anna said she loved them all, but it was hard to get close to them [her children], because she was so afraid of losing them since she had lost over half her children. She'd be involved with them, as far as they could come to her, I guess, until probably they were at least ten, and even then she was still a little distanced. It was actually not until they were pretty much grown up or married that she'd get close again. But basically most of them called my Aunt Ethel "Mother," because Anna couldn't get close anymore. It just hurt too much.

And then my Aunt Ethel did the same thing when she lost her two children. These were the only two children she had. One, the little boy, died when he was two. He was the one that was run over by an ore truck in front of her, driven by one of the Chiatoviches. It was an accident. And then her daughter was killed around Walker Lake. She fell out of the car coming



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Ernie, Anna ("Baba"), Louis, Virginia, and Ethel Shirley. (Photograph courtesy of Sherry Mattei.)

home from college . . . for her twenty-first birthday. An engagement party, and her graduation from college was also that year.

Ethel didn't handle it well. We were there when the police came. I was fairly young—about ten, I guess. And when they came, it was Thanksgiving day. Ethel went to the oven, took the turkey out, threw it out in the backyard, went into my cousin's room and shut the door, and nobody could get in there. She was in there for about a day and a half. And the daughter's room, she never changed it. She never changed the bed. She never took the clothes out of the closet, nothing. And no one else was allowed to go in that room, ever. She said, "That's it. I'm not getting close to anybody ever again." And she didn't. I guess you could say she was cold. But if you needed anything, you could certainly go to her. It was the same with my grandmother. They were not huggers.

My grandmother got close to me for some reason. My mother was her favorite—the youngest, the last child, her very favorite. And so I moved back in with her after college, and we were really very close. I think she finally just needed somebody, and she felt I was going to be OK. But anytime I would go anywhere without her, she was nervous. If I was going into town shopping, it didn't matter what time, she wanted to go with me. She actually once said, if any of her other children or grandchildren died, she hoped she was with them. And she didn't have a death wish by any means, but she just

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"My mother [Jane] was [my grandmother's] favorite—the youngest, the last child, her very favorite." Jane Boyd (right) feeding chickens with an unidentified friend. (Photograph courtesy of Sherry Mattei.)

said she couldn't take anymore. She had lost (she had said at one time) over twenty, and that would have to be terrible. I can't imagine it. I really can't. But she was never a bitter person, never. Always up, except for that.

If you went into her bedroom, she'd have one picture of Cora, the oldest one that had died at two. And the picture was about five feet by three feet. And she had pictures of all of her family that had died all over the wall, but none of the living ones, which was odd. And she would not talk about them. The living ones, yes. She was extremely interested in them—how they were doing, what they were doing. But the others, no. She just wouldn't. And she wouldn't go to the graves.

Anna's nickname was "Baba" [pronounced Bobba, which is the Basque spelling], which is grandmother in Basque, because so much of her family married Basque—the Chiatoviches, the whole family. She was well loved in the community. Her house was never empty, never, and the community center is now dedicated to her. The schoolchildren would always stop there after school, and she always had a pot of coffee on and some dessert made. All the miners would stop there. And she had families living with her continually when they didn't have money or didn't have a place to stay. She'd always just tell them there was this spare room, so she was always doing that. But as far as getting real close to somebody, no, she really couldn't do that.

Her one regret was she couldn't get more education. She did finish and get her high school diploma by mail when she was sixty. And when I would

go to college or any of my cousins would, we'd always send her our books, our papers, everything. She studied and read everything. She subscribed to over fifty magazines and newspapers. Constantly read. My one uncle, Ernie, who was a geologist, she was really interested in that: why he would think something was where, and how the place was formed. She really got into that. Very, very intelligent lady.

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At the time I was born in Los Angeles, my parents lived in Silver Peak. He worked for the power company, and she had a teaching degree, but she just worked substitute teaching at that time in Silver Peak. And then he finally did transfer back down to California. That's where he was from. I spent the first six years of my life in Silver Peak and then every summer thereafter. I always came back in the summers and stayed with my aunts and uncles. They had the horses, and that's what I loved to do was go out with my uncles and do all the assessment work and just be out in the hills. Riding out there on the horse back then, it seemed like nothing changed, and that was great. The old towns were still there: Weepah was still there. There were even tablecloths and dishes still on the tables. It seemed permanent. It was nice. I love the area. It's just an incredible area. I always thought it was beautiful. I'm surprised when people say it isn't. It's just peaceful. There's just something very special about it.

There was one Indian medicine woman, a friend of my grandmother's, that I used to go out with a lot, Flora Bess, and she talked about it being the Indian sacred ground and Wonder Mountain being their sacred mountain. She would take me back up in those areas. It's the Red Mountain up towards Nivloc. You can see it from Coyote Springs. It's more often referred to as Red Mountain. The Indians called it Wonder Mountain. She said she was from the All-Man's tribe. She wasn't a Paiute. She had a brother who was supposedly an Indian medicine man that lived up in the hills, who most people rarely saw.

She took me with her because she felt I wouldn't harm anything or bother anything, bother the "spirits" as she called them. So to a child that was pretty fascinating. But she disappeared when I was about twelve. No one really knows what happened to her. She kind of just left.

She said there had been very ancient tribes there. She had showed me some petroglyphs, which nobody's been able to find since. My one uncle knew where they were, Ernie, but nobody's found them since. Near Cave Spring, and the area actually where the mining company [Mineral Ridge Resources Inc.] is going is all considered the Indian sacred ground. And she used to feel anybody who didn't respect the spirits, something bad would happen to them. She said that's why so many people that worked at the Mary Mine died so young. She felt it was just very bad luck.<sup>2</sup>

## $\Leftrightarrow$

After I got out of college, I went down there on vacation. It would have been about 1968, right around there, and I got a good job offer from Foote

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Mineral company. I was a secretary, and then I would work for the geologist also, going out and helping survey, doing things like that. I wasn't going to take the job, but my grandmother said, "Well you really want to be back here. Why don't you live with me for a while? I really need you to." So I lived with her for, I guess, two years, and then I got a place across the street and stayed there. She didn't have running water, a bathroom, or anything, and that's pretty hard when you've gotten used to it. She didn't believe in those. She said it built character not to have those, that those were things you just didn't need. I did. [laughter]

I worked for Foote Mineral for about eight years. It was fantastic work. It was interesting. Foote Mineral had just started at that time with the lithium mining, and it was in mining, which I've always been interested in.

Basically, the Sixteen-to-One Mine was open. That was from a company out of Idaho, and it was running then. The Mohawk had closed down, the big mine that my Uncle Harvey had. Ernie originally found it in 1912 when he was a kid. It had caved in and some people were killed, so they closed it. And then Foote Mineral was running, but the other mines were just individual, small mines, usually one or two people.

Foote Mineral moved in a lot of trailers, and a lot of the people who came in were very transient, as far as they really didn't have any family, no connections to Nevada. They were just there to get whatever they could and leave. And then there started to be some crime and . . . some drug use which changed things a lot. It used to be nothing was locked up, but we had to start locking everything up, and that was the worst part. Well, there were several rapes in the town, a lot of break-ins, a lot of vehicle robberies, and just a lot of people going up to the old mines, say, stripping the copper wire, burning the buildings down for no reason. We used to have a lot of old outbuildings in the hills to keep the stoves in, keep the canned food in, just in case somebody got trapped or stuck. And they would take all the wood off the building, take the stoves, and then just burn what was left of the building down.

Silver Peak people became a little wary of other people. It used to be you just opened your doors to anybody. If they got stuck or needed a place to stay, you let them stay. My grandmother still did, and I worried about her, because I was afraid of what could happen to her. She trusted everybody, and she never did get hurt, never had a problem. But some of the family did. They had a lot of things stolen . . . vehicles were stolen and some of the old artifacts. Even some of the tombstones on the graves disappeared, and it was just sad to see that go.

Basically, there was a lot of drug trafficking. There was a back road from Los Angeles that came through Fish Lake Valley into Silver Peak, plus the airstrip. And from what I had heard, it was kind of a central drop for drugs for Nevada, basically, and for Las Vegas, because they could get over the California border on the dirt roads. There was a problem. We'd see different exchanges or planes landing, and we'd ignore it. We kind of avoided trouble, which probably isn't a good approach, but it was better than getting involved in something like that. Some of the family, we would try not to get them involved, because they might have done some enforcing on their own. That was occasionally done down there.

There was quite a group of miners that came in when the Sixteen-to-One Mine was going. They were building a mill up the valley, and there were a lot of people coming in and out, and a lot of them weren't from Nevada at all. They were just trying to find work, so they were bringing them in at minimum wage, and they really had no place to stay. They brought in some old, horrible trailers—no water, no bathrooms—and it was really kind of sad the way they treated some of these people.

It was Sunshine [Mining Company]. They were doing exploration work and clearing out one of the old tunnels. Parsons Construction was employing a lot of men, too, doing different work. Part of it was the Mary Mine. They were going to reopen, and one of the times there were, I guess, about a hundred different people in there working in the different areas. It was a big change, yes. Just a lot of . . . I wouldn't say strangers, but people that hated the country. They hated it there, and they weren't there by choice, and they were just very angry people. It is tough country unless you love it. It's hard to live with.

Today the landscape has changed, because of the mining and the different things they're doing. It's changed a lot. The roads have all changed, new roads. And the houses that were my family houses, of course, different people living in them. They look different. Especially Anna's house. She always had beautiful flower gardens around it, different things, and they're gone. It was an old house. It was moved originally from Candelaria. It was well over a hundred years old, but it was always kept up, always painted, flowers, trees lots of trees. It had the peaked roof with the long sloping back. And the back of it actually is two feet underground, the bottom part up to the windows in the kitchen, which was fun during thunderstorms when it would flood. Up to two feet of water in the house . . . .

But just seeing the yards gone, the old corrals we had for all the horses and seeing a lot of the mustangs and things gone. Then I saw a lot of them shot [over Labor Day 1996], and that really bothered me. There were twentythree or twenty-four that were shot at the one family spring when we drove up there. They had been dead two or three days and to think somebody would do that. It's a different attitude. No respect for life, I guess. Just not a lot of respect in a lot of ways—for the land, for the animals, for the homes. Just seeing the way things are run down and dirty and a lot of trash. There just never was trash there before. There were no junk cars. Everything was picked up. It was clean. Even though it was hard to keep clean, people took a lot of pride in that.

I guess it was just a family town. Everybody was related, or you called them a cousin even if they weren't. And everybody worked together and were friends. The only one there now [from my family] is my Aunt Ruby, 221

who is my aunt by marriage. It is hard to see the family homes with other people in them, and it's just sad.

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Notes

1. Ford, Janice Johnson oral history, 331.

2. Sherry clarified that diseases such as silicosis and Valley Fever also caused early deaths in the Mary Mine area, and as a child she was confused by the two different theories about deaths at the mine.

# 9 New Life, New Challenges, 1970-1990

By 1970 Foote Mineral Company's lithium plant was operating smoothly, promising twenty years of employment for the Silver Peak community. While it wasn't exactly mining, it offered steady work for the community, whereas two major mines opened then closed again.

In the 1970s, the Mohawk Mine, located about ten miles west of Silver Peak in the Argentite District, again made headlines. It was discovered in 1920 by Ernie Shirley, who had three partners—his brother Louis Shirley, Stanley Chiatovich, and Harvey Humphrey. In 1951 Shirley optioned the property, and the Mohawk was developed in the 1950s thanks to financing from Avery Brundage, a wealthy Chicagoan who was also chair of the International Olympic Committee until his retirement in 1972.

Brundage created Bruhi Enterprises in 1953 to oversee operations, and the Mohawk was then optioned to Sunshine Mining Company of Kellogg, Idaho. Sunshine abandoned its option a year later. Once Brundage had developed the mine and mill, U.S. Mining and Milling Corporation of New York purchased the mill.<sup>1</sup> Once again, eastern investments made mining and milling operations possible for Silver Peak.

However, tragedy stalked the Mohawk Mine, and on October 16, 1959, a cave-in on the Hinds 202 stope, somewhere between two hundred to three hundred feet below the surface, killed three well-known miners. A major rescue effort failed, and eleven days later, on October 27, State Mining Inspector Mervin Gallagher ended rescue efforts and sealed the mine. The Mohawk became a grave for Bill Delorme, James Roberson, and Sam Sickles. Complete coverage of the inquest into the accident appeared in the *Tonopah Times-Bonanza* on November 6, 1959. Avoiding the caved-in area, operations at the Mohawk resumed, and then again in the 1970s the Mohawk was worked but only briefly.

A decade later, Sunshine Mining Company revived the Sixteen-to-One silver mine outside of town. New technology and rocketing silver prices made the old mine an attractive investment. The two companies, Foote and New Life, New Challenges, 1970-1990

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Sunshine, breathed new life into Silver Peak for the 1970s and 1980s. Both made substantial contributions to the community, building a new water system and establishing new housing. A new swimming pool replaced the reservoir and offered summer recreation for adults and children. Small local businesses once again thrived, including several bars, a restaurant, and a motel.

However, this time outsiders brought with them some of the same problems facing other towns throughout the nation. It was an era in which drugs were threatening workplace safety, and employers were making tough decisions about averting accidents by testing workers for drugs. Environmental issues brought a proliferation of regulations designed to improve the quality of life for all citizens but increasingly hampered the work of mining and chemical companies. The feminist movement brought women into mining, even into underground mines where superstition had prevented their presence before.

The mix of the 1970s and 1980s created a time of contrasts—a time of old meeting new, of opportunity beset with challenges. For example, while Foote Mineral Company complied with regulations that required a ream of paper to address, local citizens became impatient with bureaucratic red tape, took matters into their own hands, and created the Silver Lake recreation area just below the old Nivloc Mine. As in the past, Silver Peak residents accommodated change on their own terms, and the town survived.



## BEN VILJOEN: THE MOHAWK MINE

Ben Viljoen loved underground mining, a skill he learned through years of hard work and listening to old timers. Self-described as a garden tramp miner,<sup>2</sup> along the way he has also gathered a wealth of mining folklore. Viljoen worked in the Mohawk in 1975, after the famous cave-in, and he knew relatives of some of the men who remain buried there. He said the tight-knit community of miners has its own thoughts on that accident.

#### Mohawk Mine

About 1975, 1976 I was working with Steve Cate. We worked up at the Ray Rickets mine in Gabbs, a tungsten mine. And then he quit, and I had a couple of real lousy partners, so I came down here to see what in the heck he's up to. So he and I and Johnny Nickelbee were working together here at the Mohawk.

The Mohawk silver mine was about the last of the old-type mines where they had the big bunkhouses and cook shack. All that's gone by the wayside since then. The outfit I worked for was Spring Creek Mines, which belonged to Jack Zane and Mark Gavard, two pretty well-known promoters in this area. I'd known Jack Zane long before. There was one other partner, a Ray Christianson that was out at the Coeur d'Alene, and he was the mine superintendent. He was a little, short guy, and he kind of had the Napoleon complex, and we just kind of left him alone. [laughter] He's off in his own little world.

The one thing that I liked about the Mohawk, it was the last of the camp jobs.<sup>3</sup> That was about the time that mines were really turning to trailer houses instead of the old traditional bunkhouse and cook shack. But they had actually three bunkhouses up there—one was day shift, one was swing, and one was graveyard—and then this humongous cook shack. They charged four or five dollars a day for groceries and lodging . . . a dollar and a half a day for your groceries, and you couldn't possibly eat everything that was there, so that was quite an experience.

They had this gal out of Mina, Bobby Boyd, who was married to an old cowboy, Les Boyd. I can tell you stories on that character all day long. But anyway, she was the cook. And the meals that they put on, you could have made three meals out of any one. At dinnertime there might be pork chops, steak, and then some kind of noodles for the old-timers that didn't have any teeth, and then salad and potato salad, noodle salad. They really treated the guys right. And that little Ray Christianson would chew Bobby out in the morning, because she was feeding thirty guys and would have one plate full of pancakes left over and feeding them to the chipmunks, and he'd be all upset about, "Oh, wasting money." [laughter]

This cook shack, it was just monstrous. Well, first you went through the front door (I guess I'll describe the whole thing), and that's what they call the lamp room. That's where you plug in all your mine lights. Our slickers and all our underground gear is there. Then you went through another door, and there was a hallway with apartments on both sides for the big shots or investors to stay in, so they were pretty swanky. And then you went into this humongous dining room. Beyond the dining room was this huge kitchen, and then a big commissary where they stored all the groceries. Behind that were two more apartments. One was where Jack stayed: the other was for Ray Christianson. Of course, I was never in those, but I assume they were pretty nice.

The bunkhouses themselves were three buildings side by side. They had partitions in them and two bunks to a little partition, so each guy and his partner would stay in there. You see, you'd better get along with your partner. You work with him all day, and then you're sleeping about four feet away from each other all night.

That was what they call a dry camp. There was no women and no alcohol allowed up there, and you worked ten days on and four days off. One thing about Jack and Mark, they looked out for the miners, so the bunkhouses were real well insulated. They made a point of always having plenty of drinking water, and then what they called "gray water," or just crummy old water that was used for showers and laundry or that sort of thing. It 225

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wasn't potable water. They had plenty of water, which had to be hauled from Silver Peak, about twenty-seven miles, past the dump, across the valley, up into the mountains behind the Sixteen-to-One. Parsons did all the hauling, and that road is just horrible into the mine. They'd haul the ore from the mine down here to Silver Peak (there's still a little muck pile behind Parsons's yard), and then they'd crush it and reload it onto highway trucks, haul it into Mina, and put it on the railroad.

There used to be this water-truck driver, old Spud. Anyway, the mines are eighty-five hundred feet [elevation], and here comes the snow. It blew in there about four feet deep and snowflakes the size of silver dollars coming down. Bobby, the cook, was having a heart attack, because she figured that they were going to run out of groceries—we're snowed in for the winter and she's running around doing this inventory to figure out how long she's going to make the supplies last. A few guys made attempts to get out of there. You'd drive along the ridge top and then straight down into the canyon. You could kind of make it out onto the ridge and look into that canyon—no way to try it.

So anyway, a day or two went by and the clouds parted. After a snowstorm the sky is crystal clear, and there's flakes of ice coming down, and you could hear a pin drop for miles. Well, we heard this low rumbling noise, and I couldn't figure out what in the heck was going on. It kept getting louder and louder. And here comes Spud driving Elton's water truck, and the snow was so deep he was pushing snow. This is a big Kenworth truck pushing snow with the radiator. We had figured it'd take a dog team to get out of there, so we asked Spud, "How in the hell did you get up here?"

And he said, "I couldn't find a place to turn around." [laughter] Once he blazed a trail in there, then everything was OK, but we had some times up there.

Another time there was a big earthquake. It was so severe that it knocked all the canned goods off the shelves in the pantry. Everybody on the surface felt it. It knocked the cable out of the shiv wheel on the headframe. I guess it shook things pretty well, but we were working underground—never felt a thing. Of course, the panic was on. They thought the whole mine had caved in and everybody was dead, so they called us out. We figured, "Oh, another fire drill," and just kind of wandered out. Here everybody's running around in this big panic, and we never felt a thing underground.

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The Mohawk is where they had the cave-in.<sup>4</sup> There were three guys buried up there: Sam Sickles, Chief Delorme, and Jimmy Roberson. It was a terrible, terrible deal. They had a huge stope up there, and it was nearly ninety feet from the hanging wall to the foot wall—big, square-set stope. There was a big misconception, which this might be a good time to get cleared up. I don't know the name of the company. It was about 1964 that it was operating. They had an engineer named Camozzi in there that decided to pull a foot wall. See, in the Mohawk you have high-grade stringers of very, very high-grade silver; almost jewelry rock, but these little narrow stringers go out into the foot wall, and the foot wall is very blocky. The hanging wall was good, but the foot wall would run away from you sometimes. So this engineer decided to start pulling the foot wall, which . . . well, that took all the integrity of the square sets out. The foot wall started to slip, and that pulled the square sets into a diamond shape. Then they have no strength at all, and so everybody quit—walked away from it. (In those days everybody pretty much went to Grants, New Mexico, to the uranium mines.)

The three guys working in there had worked in the stope. This engineer asked, "Well since the stope is condemned, could you guys . . . ." Asked these two partners if they would stay over and pull all the machines, the drills, tuggers—all the equipment out of that stope. Then they were going to go ahead and condemn it. This happened on swing shift. They pulled a nipper off that was working that regular shift, and they were in there pulling the equipment when she turned loose, and that was on the 300 level. I forget the number of the stope. And the whole thing came at once, all the way to the surface. There's chunks of trees and sagebrush and stuff down on the 300 level. That's 300 feet—a crater the size of a football field on the surface, so it all just let loose at once. It came so hard, they had steel air doors.<sup>5</sup> It blew them right out of the rib on the 300 level.

They put out an emergency call. The best miners from all over the western United States showed up. When they saw the mess, they knew there was no way the guys could be alive, but the families were up in arms. So these guys with this muck piling . . . One crew started out for the incline shaft, spiling a drift—that's where you drive timber ahead of you through the muck pile, and then catch it up with sets. And then another crew started from the 300 level in the main shaft and drifted toward each other trying to recover their bodies. Of course, there was no hope, and they never did recover their bodies. They're still buried there. They put up a plaque in honor of the guys, and some no-good rat stole it.

The big misconception that the company and the mine inspectors bought is the story that it was an act of God—that they had been doing a lot of Cat work on the surface to do drilling, and it had rained real hard, and the water soaked into the drill holes and made the whole thing cave in. Everybody who was involved knew exactly what it was—that you couldn't relieve that foot wall or the whole place runs away with itself.

And one story shows [laughter] when your time's up, it's up. As that stope was taking weight, of course, cracks were opening up and everything else. And this one miner told this nipper (his job was to slush [operate a slusher], keep pulling muck fast and furious as he went all around his work area and put wedges up into these cracks), "I'm sticking around until those wedges start falling out, and then I'm out of here."

And sure enough, the same day of the cave-in, those wedges started dropping out of the back. So he rang for the cage, went up and got his paycheck, jumped in his car, and headed for Grants, New Mexico. He was killed

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in a car wreck at the exact same time that stope flopped. So he would have saved some gas money just by staying where he was.

I know the younger half-brother of one of the miners. George Holcomb's older step-brother was killed in the cave, and George and I are pretty good friends. And then Steve Cate knew those guys who were killed. They were real good friends of Steve's dad. They worked together all over the country, so I heard a lot about it from Steve's dad.

I had heard all these stories, and then we worked in the stope right next to where this had happened. First of all, going back and seeing this drift that the guys had spiled through the muck pile . . . . It had been all barricaded off. It was kind of a tomb, and then the company decided, "Well there's some more [ore] in there. We'll just . . . ." They kept moving the barricade ahead a little bit. Anyway, we ended up in the stope right next to where this had taken place, pulling pillars that had been mined out. The last thing you do is pull the pillars and leave, let it cave or back fill it. And it was kind of eerie, because these guys' coats and water jugs and things were still hanging where they had left them.

That was a pretty wild stope. I had always heard from the old-timers that the ground kind of works with the tides; at noon and midnight, if it's going to move, the ground really starts moving. I always thought, "Yeah, yeah," because miners are just as superstitious as they come, but sure enough, in that one . . . .

Well, the last thing Mark or Jack wanted to do is hurt somebody, but they did need that ore. Steve and I, they knew we weren't the type to just go in there and take a nap, so they said, "If you start feeling a little weird or things don't seem right, just sit down and wait a while and have a cigarette and watch it."

We worked swing shift, because they figured if it was going to flop, they didn't want to endanger anybody. Day shift is when most of the people are in the mine. Swing was just a few miners, and then graveyard was timber repair and muck haulage, and swing was mainly muck haul. So sure enough, about eleven o'clock there was a great huge crack through the middle of the back, all the way up, and about eleven o'clock it started working, and dust would trickle out of it. By midnight, slabs would be dropping off the back. We had bulkheads built all over to kind of protect us, so about eleven we'd usually just hide out until the end of the shift, and by midnight you could hear it grinding and everything else, and then it would start settling down again. As far as I know, that stope is still standing. But, boy, we figured every night was the last.

That gives you an eerie feeling. These are guys that I'd heard about for years, most of my life. To hear stories is one thing, and to meet family members. Everybody was so shook up about what a charade the company had pulled in degrading these guys' name, and all the guys that had worked in that stope, and actually getting the mine inspectors to buy something like that.

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But then on the other end of the stick, one thing that's so nice about mining is your stope or your raze or your heading is your palace. You do it your way. Nobody really fools with you. The shifter usually comes around twice during the shift to see if you need supplies. If you can handle a job, that's fine and dandy; you do it your way. If not, they just tramp you and hire somebody that can do it. There's no foolishness or second tries. But then something like the big cave-in slaps you back into reality once in a while. You've heard all these stories time and again, and then there you are, working where it happened, and to prove it even more are their coats, their water jugs, their lunch pails, you know, just as if they were still working in there. The two miners, those two guys were some of the best. The nipper, he probably would have grown up to be one of the best, but he was just a kid breaking in.

Miners are very, very superstitious. You don't touch anything. That's hallowed ground over there. We went in, and we admired the guys' timberwork from the rescue crews. We knew a lot of the guys that had been on the rescue crew, and we went in and looked at the conditions that they were working in but not to steal anything or touch anything.

One thing to remember with miners—where you work, live, eat with your partner—all tramps are very, very tight-knit to this day. The wives all know each other; the kids all know each other. When somebody's hurt or killed or got cancer or something, everybody's constantly on the phone to each other. Everybody, no matter how spread out you are, everybody knows what each other is up to. So when one of the gang . . . something happens, everybody feels it. So that's, I guess, why it would be emotional to others besides the family. And you depend on your partner. If he makes a mistake, you usually don't get torn up too badly: either you get skinned up, or you get mangled. [laughter] So you have all the faith in the world in all your buddies.

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Well, now with Mark Gavard and Jack Zane, it was anything but a stock scam. That was when the price of silver roared up to forty bucks: that's when we were there. That was kind of the tail end when the price went way up. And then, see, that ore is kind of complex. They used to mill it at Vollmar's Mill, and when we came into the picture, it had to be shipped to the smelter. And later on an outfit in Gardnerville, called Veda Grande, was milling the ore for us. They had a flotation mill over there, so they were shipping the ore all the way to Gardnerville to have it milled. And then, who knows why or what, but Veda Grande decided to buy Jack and Mark out. Their big shots came up, and they were all looking around. They were going to spend a million bucks fixing up the bunkhouse and even planned a lawn. They were going to do this and do that, hire all these people, but they never once mentioned upgrading any of the equipment underground or doing any development work. 229

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Everything they talked about spending any money on was for show the kind of stuff the stockholders would see. And so we thought, well, this sounds like a pretty good time to cash our checks while we got the chance. I had been on to a job of just mucking out from under the stopes, and Steve went on the tramp. He had heard about a few jobs over on Candelaria, the Potosi Mine over there. So he thought he'd put the rustle on them for the both of us, and then I would give him the gas stake. That's what happened, and, finally, he came back, and we'd landed some work, and away we both went.

Oh, I'm sure it was a stock scam, but the mine operated for quite some time after. But those showed all the earmarks of a big swindle, which usually doesn't last more than a few months, and everybody's paycheck bounces on and on, and the sheriff comes and locks everything up, including your clothes and tools. So we thought it would be a good idea to get out while the going was good.

But they did operate. And then they got another guy killed, so the mine's got a reputation of a killer mine, when actually it's very good ground. It's just that accidents have happened.



#### ALLAN YOUNG: SUNSHINE MINING COMPANY

All mining engineers dream of starting from scratch and building a mining and milling operation from the ground up, according to Allan Young. Sunshine Mining Company gave him that opportunity in the 1980s when it opened the Sixteen-to-One silver mine outside of Silver Peak. Young described Sunshine's operation including the technological innovations used to offset plummeting silver prices. Sunshine boosted employment and helped Silver Peak's residents by such contributions as improving the water system. While Young's first impression of Silver Peak was less than favorable, he found that the town grew on him.

When the Idarado [an underground mine in Colorado] closed down, we all went looking for work, and that was still a pretty good time, late-1970s. I had several options, and the Sunshine Mine in Kellogg, Idaho, offered me a job as a senior mine engineer, so I moved my family to Coeur d'Alene. A few months after I got there I heard about this project that Sunshine had in Nevada called Sixteen-to-One. I got an opportunity to do a little work on it, a little ore-reserve work and some estimating.

Mid- to late-1979, the price of silver just started shooting up there. The thing that really was driving the silver price was the attempt by the Hunts to corner the market. By the end of 1979 it was above twenty dollars and even-tually, in early 1980—January, maybe February—pushing almost fifty dollars there for a time. Just about any silver property could make it with those

prices. [laughter] And, of course, during that same time Carter was president and inflation was pretty high—double digits. Interest rates were pushing twenty percent: they were really high. There was a lot of uncertainty in the economy. And then, of course, you had gold prices that were in the \$800 range.

When the price of silver started going up, everybody said, "Well, let's put Sixteen-to-One in operation." So they needed someone to do a plan and budget for the thing, basically, and I got picked. I was working on it in May when Mount Saint Helens [volcano] went up, because I was at work that Sunday. We finished in late May, early June, and then there was a June board of directors meeting. In March the silver price kind of crashed, but it turned right around that quickly. In June I think the prices were still over twenty dollars an ounce, twenty-five maybe. They were still good, real good. And I think we assumed thirteen dollars an ounce or something, which at that time seemed pretty conservative, but history showed it wasn't. [laugh-ter] At any rate, it was a slam-dunk as far as the board goes. I was offered the job as project manager, which meant I had to move down there. Well, I jumped at the chance, because for every mining engineer one goal in life is to put a mine into production.

## Helping the Town

I had been down to Silver Peak a couple of times before. [laughter] I have to admit it . . . first impressions weren't real good. [laughter] After living in Coeur d'Alene and southwestern Colorado . . . . Lots of trees. [laughter] And pulling into Silver Peak . . . . Well, I've got to say, I thought that probably going through town with a D9 with the blade down would probably be an improvement. [laughter] But, you know, that's just a first impression. It was the end of the road, and there weren't any trees around, and the place looked like it could use a good picking up, and it was just so much different from where I had come from. It's a place that you have to give a chance to grow on you.

My wife didn't even see the place before we moved down there. I talked to her about it and told her, "Look, it's a really terrible, terrible situation," and I kind of tried to prepare her for it. Well, she actually told me that I had overdone it a little bit: it wasn't as bad as I had told her. [laughter] I tell people that we got there at night, and I kept the drapes drawn for a couple of days to get her used to it. [laughter]

There was somewhere around 250 people in town. There wasn't a grocery store. You basically had to go to Tonopah to get a loaf of bread when I first moved there. And even at that, if you got in there on a Friday night after payday at the new moly[bdenum] mine (600 people out there), you might not even get a loaf of bread—the cupboards would be bare. [laughter] They had Coleman's grocery store, and that was really the only grocery store.

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It was amazing. What most of the people in Silver Peak did on the weekends, they would take a couple of ice chests and go over to Bishop to do their grocery shopping. That was only 105 miles.

There was a kind of a bar in Silver Peak. It was called the Shifting Sands. It was Jim Gavin's place. He was still alive, but I think he was in the hospital at the time we started up there. You could get a sandwich in there, and there were a couple of booths: there wasn't much room. And then that was about it. Harvey Humphrey had a gas pump in town there, and you had to go get him, and he would pump gas for you. A lot of the old-timers were miners anyway, so I think they always like to see mines go in. But on the other hand, they were a little apprehensive of what such a big development would do to the town. They lived there because they liked it the way it was.

In July of 1980, I came down to Silver Peak with Viet Howard, who at that time was the chief operating officer of the company. We held a little town meeting and went over what we were going to do. I think most people wanted to know what we were going to be paying and what kind of jobs would be available.

There was concern about the lake, Silver Lake. It's above town and just below the mine, and at that time it was being fed by the mine. There had always been a spring up there, and then, when a previous company had driven a tunnel into the mountain, they had intersected some more water and that allowed the water to flow clear down to the valley.

The thing had sort of been put in over the weekend one time. [laughter] Someone got the idea that, "Gee, we dam this up, and we could make a nice little pond here and stock it with fish." Good idea. I guess they went through all the proper channels to request that. (I wasn't there at the time.) But for whatever reason, it got tangled up in bureaucratic red tape, and so, finally, one weekend someone went up there and just put it in. [laughter] There it was. "Now what are you going to do about it?" And then after that, they got the fish and game [Nevada Division of Wildlife] to start stocking it with trout. It was a real nice place.

We didn't want to disrupt that. The water was pretty good quality, so it was just a matter of getting the suspended solids, the particles of dirt and so on, out of the water before it went down there. We put in some settling ponds to do that. It took us a while to really get the water cleaned up. When we finally got our permanent pumps in down below the mine, the water cleaned up pretty well and fish continued to thrive in there. In fact, that's the first place I took my kids when they got old enough to fish.

Water was another concern, because the water quality in town wasn't that good. Their system there was just not adequate, so a lot of times the water would just go off. The pipeline coming in from the well was asphaltcoated pipe, and that asphalt was apparently coming off. A lot of times you'd be taking a shower when you'd get this black greasy stuff on you. [laughter] It was kind of nasty.

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They had an irrigation-type pump. I remember going in the pump house one time, and they had this thing rigged up where they had this ... I don't know whether it was vegetable oil or something dripping into this thing for lubrication. They couldn't use petroleum-based oil, because it was a domestic or potable water source. The pump would overheat a lot, so they took a rag and stuck it over the pump motor, and they had water running on it. I mean, if you touched anything in there, you're apt to get electrocuted. [laughter] It was pretty scary. They just didn't have any funds to do anything, so definitely that was a big priority.

One of the first things we did when we came in there was hire an engineer to do a study on the water system, to recommend an upgrade and what needed to be done, not only to provide the current needs, but also the future needs of the town. I think he worked with one of the government agencies to help secure a grant to upgrade the system. The bottom line is, eventually, we got a new water system in town—larger diameter pipes and plastic lines and a proper pumping system. After that, for the most part, water problems were gone. That pretty well took care of it.

During the construction period of the mill, we had some pretty rough characters in there—the construction crews and the welders and the steel workers, those kinds of guys. A pretty rough-and-tumble bunch. [laughter] They liked to party, and they got pretty wild around there from time to time. That didn't sit very well with a lot of people. Fortunately, that was short lived.

Well, bringing in another one hundred people or so created problems for a while, but it also improved things. With that many more people, the town was able to support a small grocery store and a good restaurant. Hefty Sanderson and Alice came in, and they built up and turned the Shifting Sands into the Miner's Inn, and it became really a nice place. The food was great—nice little restaurant and bar there. And then there were a couple of other places. The Dead Coon Saloon sprang up. That was just below our place. And for a while, you could even rent videos in Silver Peak. [laughter] Almost didn't have to leave. It was nice to be able to not have to drive fifty miles to get a gallon of milk—definitely an improvement.

#### Housing Shortage

We, of course, recognized early on that there wasn't any housing for anybody. The company had done some work down there before, and we had a couple of trailers that we owned in town . . . there was enough room in those trailers for like six guys.

At the same time, there wasn't any place in Tonopah either, because Anaconda was developing a big moly mine, and there was a bit of a boom going on over there, too. So there just wasn't any place to live, and we knew we had to do something about that. 233

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Prior to the project actually being approved, we went around and bought up some property in town. We bought a big lot that would eventually become a trailer park. We bought some lots on the north end of town where we eventually put in some apartments and some two-bedroom family units and then some studio apartments and also some houses. We had bought a house down on the south end of town that we kind of converted into a bunkhouse or a boardinghouse. Then when the project was approved, we went ahead and started building. We brought in four modular houses (that's where I lived when I brought my family down), and then we also built some apartments. We also started a program where we would purchase mobile homes and then lease them to our employees on a lease-option program, so after a period of time [they could buy]. It was a pretty sweetheart deal. I don't even think there was any interest charged.

We had to provide our people with a decent place to live. The type of mine that we were putting in, especially because it was all mechanized, was going to require some pretty good technical people as well as skilled operators. We were going to ask a guy to get on a third-of-a-million-dollar piece of equipment. We definitely wanted to keep him happy. [laughter] We wanted to keep our turnover down as much as possible, so we knew we had to provide these people with a good place to live. It's tough enough moving into a place like that: if you don't have decent housing, it's tougher yet.

#### Sixteen-to-One

We planned to develop the mine from two different directions. First of all, as an underground mine, the idea was that we would begin work on the 7,000-level tunnel, which was driven back in the 1960s by Mid-Continent Uranium. We were to go in there and widen that tunnel out, and then, in the back end of the mine, drive ramps downward. That was our part of it. Then we brought in a contractor, American Mine Services, to start a ramp a long decline from about 175 feet below the 7,000-level adit. And then at the bottom of that decline, they were to start ramping up to meet us.

The first thing we did, we went out and purchased a 950 loader and a D6 Cat. That was what we needed to just barely get started. We put in a kind of a storage yard down where the mill eventually was developed. Also down there at the location of the mill, we put in a temporary trailer park. I think that's where some of the miners for American Mine Services lived.

I guess by mid-September or late-September, we were pretty well rolling. We just had a handful of people, and the contractor didn't have a lot either. He was just driving a single-heading, single-tunnel phase, three shifts a day, seven days a week, basically.

Things went along pretty well until we started to hit water down in the lower tunnel, and by January of 1981 it was becoming a rather serious problem. We didn't expect to hit that much water, and every round seemed like we got into more and more. As a result, that ended up costing us a little more to drive the tunnel and also slowed us down a bit on the schedule, but we got through it. Of course, the upper watercourse there was actually a spring in the mine. It dried up, because we intersected it down below. But we had much more water down below, so we would pump that up to our water tanks for use. Then drill water and that type of thing and the excess would go to the lake through the settling ponds.

It was really tough for a while, because we didn't really have a good settling system and really didn't have a sump, and we had a pretty high head, so it was difficult pumping. And then, of course, there were a lot of fines being created by the equipment we were running. Once we got to the bottom of the mine and developed the sumps and put in permanent pumping installations, we were able to settle the water much better.

We weren't going to start construction of the mill until we were sure that the ore was down there as we had expected. We intersected it down low, and the grade was what we had anticipated, and it was good width. So about April of 1981 we began construction of the mill. This was a silver and gold property. We had done, of course, some metallurgical test work on the ore back in, oh, I guess, 1979 and had determined that the ore would respond well to cyanidation, which was the most common method of recovering silver and gold from ores, especially from Nevada. We set about to design a flow sheet, and we hired an engineering firm in Salt Lake called Industrial Design Corporation, and they designed a plant for us.

We had originally planned to start the mill up in February of 1982, and we hit that right on the money. We were projecting our first shipment of metal by April 1, and we hit that one right on the money, too.

Now the mill . . . basically, it was a pretty standard flow sheet, not much different than the way they did it seventy, eighty years ago. Ours was about 550 tons a day and basically consisted of crushing and grinding the ore to sand-sized particles and adding cyanide. We had to use a fairly strong solution, because the silver minerals require a higher concentration of cyanide than gold, usually. And then leaching—we had five different vats, one right after the other, where we got about a twenty-four-hour retention time, something like that. And after that it would go through a series of thickeners which would basically wash the slurry, the sand particles, and wash the cyanide solution from those particles. Then we had a tailing dam down below there that was all lined. We used a Merrill-Crowe precipitation, which uses zinc dust to precipitate the silver and gold out of the solutions. We had a little smelting room where we had a little furnace and actually produced gold and silver bullion right there on site. After the gold and silver was smelted and made into bullion, we shipped it to our operations in Kellogg, Idaho. At that same time, we were building a silver refinery up there. We had electrolytic refining capabilities there, and that was basically the first feed for that.

Originally, we started by smelting, casting anodes, for that, and then that became just too much of a problem for us to do down there. We just 235

didn't have the equipment for it. So then we just produced the ingots—the round, conical shaped ingots—and shipped those up there. They recast them and produced .9999 pure silver and gold.

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#### Innovations

The mining system that we had originally proposed for the Sixteen-to-One was a long-hole stoping method—long-hole blasting. We started off using that method, and found out that it required leaving a lot of ground open for a period of time. We started to get a lot of dilution, and that was one of our big problems right at first. So we changed our mining system in 1984, some time after we started up. Vertical crater retreat mining was used in other places. I was aware of it from articles that I had read about mines in Canada, for instance, that were using it, so it wasn't a unique approach by any means. There weren't a lot of mines using it, but certainly for us it was the way to go.

For a modified vertical crater retreat, rather than shoot off entire lengths of ore off the end of these sub-levels (rather than taking vertical slices of ore, in other words), we would take horizontal slices of ore by lowering charges down these blast holes and shooting a little bit at a time rather than the whole thing. And as we did that, the broken ore would fill up the void below, so it would kind of support the walls. We would just bring this up, slice by slice, until we got to the level, and then we'd go to the next level. As it turned out, it had quite remarkable benefit to our dilution. It cut our dilution from 30 percent to like 7 percent—it was a dramatic change. Productivity wasn't quite as good as the previous method, but the gains in dilution more than offset that. So that's the way we continued the mining operation from then on out.

Another problem we found was that cyanide costs were very high, and our consumption was high relative to other mines, and tailings disposal costs were high. Back in 1984, we started looking at ways that we could reduce that cost, and we found out that a lot of the cyanide that we were losing was actually just being held up, you might say, in the moisture content of the tailings that were going out to the pond. So we decided, if we could send our tailings out there a lot drier, we're going to do a couple of things: we're going to get more solution back to the mill first of all; and we're also going to eliminate the need to keep raising the dam every year or so, which was costly; and the third benefit is that we were not going to have that big pond of water that we had to be worried about birds landing in all the time.

We looked around at filters, and we finally came up with a filter built by Elmco. It's called a belt-press filter, and it had been used in the coal mines quite a bit for de-watering, but it hadn't (to our knowledge) ever been used in hard-rock tailings filtration. We decided to go ahead and do it anyway, and we put it in. We had some start-up problems in selecting the right types

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of filter belts and how we distributed the slurry . . . but in the end it turned out to be a real benefit for us. We were able to cut our cyanide consumption by more than half, and our tailing disposal costs basically disappeared. So it turned out to be a successful project for us—cut our costs significantly.

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Our biggest problem was that Silver Peak was not a moneymaker for us, unfortunately. When the project was authorized in June of 1980, I think silver was twenty to twenty-five dollars an ounce. Two months after it started up in 1982, silver dropped to four dollars and eighty-five cents. Needless to say, we hit it right at their low time as far as the silver price goes. But we had some disappointments in ore-reserve grade as well. That was just part of the business. Our capital costs were higher than what we had originally anticipated for various reasons. So in the end, it didn't turn out to be a successful mine, although we had a couple of good years: 1983 was a pretty good year; 1985, we made silver for less than five dollars an ounce—that was a pretty good year. But overall it wasn't a successful project.

Had the price stayed up, that would have solved all the other problems right there. [laughter] We got our other problems straightened out. We were producing a thousand tons a day with twenty-five people. That's a good productivity, no matter where you go. And the mill operated with basically two people and a mechanic, so we didn't have a lot of people.

The first part of 1986 our grades started to go down, and that was mainly just due to ... we were in lower-grade sections. It didn't look like it was going to come up again. In 1984 and 1985, we had pretty much mined out the best areas, and the price of silver wasn't very good. June of 1986, the management of the company made the decision just to shut the Sixteen-to-One Mine down.

At the same time, we were doing some exploration work at a mine north of Silver Peak called Weepah. We had done some drilling there and had gotten some interesting results. What they decided was, "Let's put Weepah into production, and we'll run the Weepah ore through the mill." We hired a contractor, Lost Dutchman Construction out of Reno, to do the mining out there for us. It was an open pit. Unfortunately, we were premature in making that development decision. We should have done some more drilling, because the grade didn't turn out to be what we had hoped, and the ore body was more variable than we had anticipated. That lasted until, I guess, early 1987.

It was looking like we were going to be shutting the mill down and kind of mothballing everything for a while. I wasn't really crazy about that. Frankly, it was kind of sad to see it happen, so I was ready for a change. March or April of 1987, I took a job with Echo Bay Mines in Colorado. I moved my family in June. So that was the end of it for me. Now after that, Don Earnest took over. Later on that year, they put in a heap-leach operation, which I think was successful. 237

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New Life, New Challenges, 1970-1990 I really have a soft spot in my heart for Silver Peak. My wife and I probably had more friends there than we've had anywhere we ever lived. Most people don't get a real good impression when they first go there. I think that's probably a given. But you just have to give it a little time, and it kind of grows on you. I loved the job, and, heck, that's a big part of it. There were all real people who lived there. [laughter] They were tough. I guess that's what I liked the most about it, the independence of everybody. I'm sort of that way myself. The only thing I never did get quite used to is the wind. The darned wind would always blow. [laughter] And you would go away for the weekend and come back, and your trash cans might be in the next county. [laughter] That's just typical though for Nevada. And then, of course, when the wind would blow hard, you'd get these dust storms that were really something to see.

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# DON EARNEST: A MINING COMMUNITY

Don Earnest joined Allan Young at the Sixteen-to-One Mine outside of Silver Peak in 1981 and stayed until 1989. His oral history interview added some detail about how mining and milling technology had changed over the fifty-year period from the 1930s. Yet two other elements remained unchanged. Silver Peak's residents remained as entrenched as ever, its "cast of characters" winning the respect of newcomers. And the bond between miners remained, as shown by the tribute paid following a mine accident that killed Superintendent Phil Lapp.

#### Sixteen-to-One Mine

Silver Peak, as well as Tonopah, had their locals or their natives who'd been there all their lives, and anybody who spends their life in that country, born and raised there, is a certain breed of cat, so to speak. Places like that are not exactly the garden spot of the universe. But Silver Peak natives did not seem to mind at all the fact that here's these outsiders or non-natives coming in, living and working, and in a lot of cases supervising them.

The Sixteen-to-One silver mine was just about four and a half miles due west of Silver Peak, up in the Silver Peak Range. It was just past the old ghost town of Nivloc. The mill was closer to town . . . oh, two and a half miles from town, I'd say.

My job initially was as chief geologist. I was responsible for all the geologic happenings at the mine and also all district exploration, which was defined as just about anything within truck-haulage distance of the mill. Initially, the major responsibility during development was to make sure that the miners stayed on the vein, that the vein was intersected where we anticipated it, and to map the geology and to do underground sampling for comparison to what the calculations had been, which had been based on the drill holes. The geology was, in some cases, very much simpler than some of the places I had worked—meaning that after the vein was deposited, it was not faulted off in a bunch of places or overturned or folded or things like that. It was pretty much in there as a tabular feature, like a book standing on its edge, so it was not hard to follow. But the challenge there was to determine where along the vein, or along the main Sixteen-to-One structure, you could find ore, because even though the vein existed, there wasn't always ore-grade mineralization.

Early on in the project, we did do some ore purchasing where someone who had a small mine out in the general area (sometimes as far as a hundred miles away) could ship us ore, and we would purchase it and then mill it at our mill there. That's something that's rarely done in the West anymore. The main reason is that once you start mixing other folks' ore in with your own, then you create a problem of accountability of your product. But we did it there for two reasons. One, we thought we could make money doing it, and secondly, it's a common problem everywhere in the West now. The little guys who are mining a few hundred tons a month or something like that don't have anyplace to process their ore.

#### Mill Technology

We supplemented mill water from the water that was pumped out of the Sixteen-to-One Mine, but we still had to use well water: that's what we called make-up water for the plant. Clean water around Silver Peak is a precious commodity. Our well that we drilled for the mill up there, I believe, was nineteen hundred feet deep. It cost quite a bit of money to put that well in. In that country nobody likes to just dump water out on the ground and lose it, so the point of trying a belt-press filter to de-water our tailings was to help recycle the water and also to eliminate the cyanide going out there in the water that was standing in the pond. We could essentially take the water out of the tails at that filter and put it directly back in the mill.

Our decision was based on cost. We looked at the cost benefits—certainly the unit itself, the capital expense of putting it in (we had to build a separate building to put it in), and those costs weighed against the operations' cost savings over time. We looked at them (I could be wrong on this), but I think the payback—in other words, the amount of time that went by before the operation savings paid for the installation of the thing—was somewhere around nine months, which is pretty short in terms of payback time. Savings came from reduced cyanide costs in the mill, because we could return cyanide that was already put into the plant solution system and use it again. We didn't have to keep buying as much cyanide. It also came from savings in water. We didn't have to use water from the well for that, which had to be pumped out of the ground, so there was electricity savings there. And we saved the quarter-of-a-million-dollar capital expense of raising the tailings dam. So those were the main reasons. 239

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New Life, New Challenges, 1970-1990 We had some problems when the unit was first installed, the chief one being the life of the belts. The material was pressed between two belts that looked kind of like a coarse-weave fiberglass or plastic material which water could pass through. And because coal is quite a bit different material than ground-up quartz-vein ore, we had some belt wear problems initially, which made us go through quite a few belts. Those were solved by making sure the distribution of the material on the belt was even across the width of the belt rather than just dumping it in a glob in the middle. Once that was ironed out, the unit worked just fine. It's something that pretty much ran by itself, and somebody would have to check on it periodically, but it didn't require an operator right in the building.

#### Mine Technology

We were probably the first mine in Nevada to use a mining method that was called modified vertical crater retreat. With this method, sub-levels or drifts in the ore are driven every 125 feet vertically; those were the spacings we used. And then from the upper sub-levels down to the lower sub-levels, we used a drilling machine called a down-the-hole hammer rig, which drilled a five-and-a-half-inch hole from one sub-level to the other. And then those holes were loaded with explosives, and a large amount of material was blasted at one time, generally on the order of five hundred to seven hundred tons, something like that. It was a much lower-cost mining method than some of the other select methods, like shrink stoping or cut-and-fill. We were able to use it at Silver Peak because of the attitude of the vein. In other words, it was fairly steeply dipping. Also the vein width, rather than being just three to four feet wide, which many of the veins in that country are no wider than that, the Sixteen-to-One vein averaged about fourteen feet wide overall and would get up to as wide as fifty feet on one of our levels.

It [modified vertical crater retreat] was developed up in Canada in the Sudbury district. Canadians actually were the ones that worked it out. Then Allan had been up to Sudbury and toured those operations back in the late seventies and realized that it was something that probably could be applied at Silver Peak. I think we ought to give the Canadians the credit for developing it. We probably added a few wrinkles to it there, just to fit our operation, but the basic method was developed up there at Sudbury. We varied the number of holes, for example. We felt that the placement of the holes was very important, so we made sure that those were surveyed in by transit, or that survey points were put in for the drillers to work off of, so that they could accurately determine the location of the hole. Occasionally, we would survey the bottoms of the holes where they broke through, where we had access to do so. And we sampled the drill-hole cuttings: the geologists on a daily basis went down and logged the cuttings. That way we could tell when a hole got out of the vein and into the hanging or foot-wall waste. And by telling that, then we could say, "No, we better not use this hole. We better bring one in a little closer or a little further in, so we're not blasting waste." That's something we didn't start doing initially but started to do after we got into operation. They do that up at Sudbury someplace, too.

Allan left in 1986, I think. And then I left in 1989 and was transferred up to Boise, Idaho, to manage the explorations for the whole company. And not very long after I left is when Sunshine shut the mine down and signed a lease agreement with an outfit called Zephyr Resources, which then came in and didn't resume mining at the underground mine, the Sixteen-to-One, but went up on Mineral Ridge at the Mary-Drinkwater and started open-pit mining up there on mineralization that we had drilled out when I was at Sunshine in Silver Peak.

Well, Zephyr backed out and assigned the lease that they had with Sunshine to an outfit called Homestead Development out of Carson City. Homestead had a gypsum mine, I think, up out of Carson City, which was the only other thing that they had going. A guy named Art Wilson owned the company. And Homestead then came down and continued mining up at the Mary Mine. But they went bankrupt, and the ownership of everything was turned back to Sunshine. Sunshine originally had the Mary-Drinkwater and other properties up on Mineral Ridge under lease from a trust—a group of people back in Tampa, Florida. And I believe it was after Homestead left or went bankrupt, that lease was returned to the trust by Sunshine, and Sunshine's involvement on Mineral Ridge stopped at that point.

I would imagine that Mineral Ridge Resources Inc. has come back in and has agreements with all those underlying owners now. The Mary-Drinkwater area was owned by this trust. Moving up on top of the ridge, up to the Oromonte area and . . . (gosh, I'm forgetting the names of some of those places) the ownership on those were different. I don't remember that we had that, but I would assume that Mineral Ridge Resources has gone into consolidation, and somehow has it all under control through agreements with the underlying owners now.

#### Cast of Characters

Silver Peak had a lot of character. It was a very desolate place, but it was a really beautiful one, too. I used to enjoy sitting in the Dead Coon Saloon and looking out across the valley, because there were some big windows in place of where a back bar would normally be. For the most part the people of the town were good people. You could call them real people. They scratched out a living, had been able to stay there, live their lives there. There isn't one of them that wouldn't help you if you got in some kind of dire straits. They sort of understood the law of the desert—that everybody helps one another, because everybody needs help at some point in time.

We lived in Tonopah, because my wife was working as a computer programmer out at the Anaconda Hall Project, or they called it Nevada Moly at that time, which was about twenty miles outside of Tonopah. If we would 241

have lived in Silver Peak, she would have had probably an hour and a half commute every day, as opposed to the forty-five minutes that I had to Silver Peak by living in Tonopah.

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I got to know quite a few of the townspeople. I stopped for beers on the way home from work occasionally in the original Shifting Sands Saloon, which was the only bar in town and was owned by Jim Gavin. Then competition opened in the form of the Dead Coon Saloon. A guy named James Allen, who ended up working for us later on, he opened the Dead Coon. He ran that for a couple, three years and then finally went out of business and went to work for us. He was an excellent mechanic. And by that time the old Shifting Sands had closed, and Hefty Sanderson had built and opened the Miner's Inn, which was actually the demise of the Dead Coon, I think, when Hefty opened that.

The swimming pool in town—the land that it was on was owned by what was then Foote Mineral and is now Cyprus. But Sunshine agreed when they went into town to jointly support the swimming pool from the standpoint of its operating cost. Foote actually did all the managing of it, but we paid half the bill. Once a year we would have Swimming Pool Cleanup Day. It was usually in the spring when they finally filled the pool up with water after the winter, and that was always a good time. Generally, it was held on a Saturday and lasted all day, started early in the morning, and, of course, there was always lots of beer, and by the time the afternoon rolled around and the barbecue started, everybody was in pretty good shape.

Individuals that I particularly enjoyed—of course, I mentioned Ruby Griffin, the postmaster. Her husband, Griff, owned an old cable D8 Cat that we rented periodically there at the operations or out on our explorations projects. Griff was a first-class guy. Hefty Sanderson, of course, was a great guy. He and his wife Alice ran the Miner's Inn there and certainly helped a lot of the townspeople out, especially some of the younger ones, with either hiring them when they were down and out, or they probably loaned money to quite a few of them to get them over hard times, I think. But they were enjoyable.

Harvey Humphrey was a special delight. Harvey was an old miner. He'd fiddled around the area for years. I think he mined up at the Mary Mine for a while. I remember giving Harvey a tour through the Sixteen-to-One on the day we had our grand opening, which was kind of an event there for Silver Peak. We had the governor there and Sunshine's board of directors. We had a big barbecue and a tent set up outside the administration building next to the mill. Early that day we took Harvey on a personal tour through the Sixteen-to-One; put him on one of our what we called a Getman wagon, which was kind of a service truck, so he wouldn't have to walk through the mine. And he was amazed at the size of the drifts that we'd driven—couldn't believe that, because everything that he had worked in had been very small.

Harvey had been involved at the Nivloc Mine, too, with Jim Gavin. And Harvey made the comment, "You know, Jim and I never thought the Sixteen-to-One amounted to anything." The old Swedish guy that had discovered it back in the 1930s put a shaft down seventy feet or so and had not hit anything that really amounted to anything. He said, "Yes, we never thought this place amounted to anything at all up here, and now it's going to turn out to be one of the biggest mines in town." But he was kind of amazed.

Silver Peak left an impression .... Well, every place I've worked has had its cast of characters, truly unique individuals, and Silver Peak was not alone in that. One event that I remember is one of the funniest things that I've seen. One of the guys that worked for Elton Parsons, who had a construction and equipment outfit there just as you come into town-tremendous boneyard of old equipment, used oil drums and whatnot. Elton was a first-class guy. I really enjoyed working with him at the times that we rented equipment from him. He had a mechanic that was dating this gal in town, and they eventually decided to get married. She was a native, and her mother lived there, too. And the wedding was held at the Dead Coon Saloon, and it was a grand affair. It degenerated towards the end though, and this guy and his new bride got in a fight. Not just a shouting match but a physical fight. They had known each other and lived together for probably two, three years. Anyhow, they got in this physical fight, and her mother got into it, and at the end of the day they carted her mother off with a broken or dislocated knee. The bride was pretty well beat up, too. [laughter] I think he ended up in jail. But it was one of those things, when you're standing there watching it, it wasn't funny. But thinking about it afterwards, you're inclined to say, "Only in Silver Peak could that happen." But that's not true.

Everybody (including outsiders) was pretty much accepted. You know, if they wanted to start trouble, there were more than enough guys willing to give it to them. Make no mistake, it could get rowdy. Most of it was alcohol derived. [laughter] But for the most part, what you ran into at the bars was pretty much your standard small-town western stuff.

There was a drug problem in Silver Peak, I know, when we were there. Well, certainly marijuana. I imagine cocaine, although I can't say that for sure. I did work or keep in close contact with the deputy sheriff that was based in Silver Peak at the time that I was manager, and I know Allan did prior to me. So we were pretty much made aware of who was doing what as far as far as the deputy sheriff saw it. We had no drug screening—Sunshine didn't. Our corporate attorney was adamant that he did not want to get into that. He felt at the time (and, you know, times were different then than they are today) that would create a larger liability problem for Sunshine if we had a testing program. It's not a view that Allan and I shared with him. We wanted screening simply because mining's a dangerous business, whether it's underground or in the plant. If a guy shows up drunk to work, you can pretty much tell. If a guy shows up buzzed on something else, it's not always easy to tell. Our fear was that somebody would goof up someplace, and somebody else would end up getting hurt or killed because of this guy's inability to function.

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Plus, we knew who spent the night in the bar, because the town was the size it was. [laughter] In fact, there's more than once when I would stop in the Miners' Inn to get a cup of coffee to take up to the mine, and there would be somebody sleeping—one of my guys with his head down on the bar. And I'd figure, "Well, he's going to miss shift," and then half an hour later I see him up, ready to go to work. And I have to go in and say, "No, I think you're taking the day off." But the drugs were a different story, and the use of those was certainly a more private thing and not as easy to detect. But we did have some incidences up at the mine, and I'm certainly not going to go into those. Some of the individuals involved went on to work elsewhere and certainly got their act together and are doing fine today. Some of them have disappeared.

Some of the old-timers, natives who lived there, wouldn't look down on a guy at all who went down every night and got just totally blitzed in the bar, but don't talk to them about marijuana. That was the worst thing in the world.

#### Miner's Bond

The saddest thing that happened when I was there was the death of Phil Lapp, Sunshine's mine superintendent, in 1985. That's the only fatality we had at the operation. He was killed on the 6810 level of the mine. He was, what we call in the mining business, slabbed. A slab of rock, or a piece of rock, fell from the back or the ceiling and hit him. That... that pretty much summarizes it. I mean, I won't go into any gory details.

I wasn't in the mine at the time. I was down in the office, but I went up to the mine right after it happened. I went underground. To help dig him out. There was a surveyor with him, a fellow named Andy Anderson, who now is back at the Silver Valley in Idaho working, I think. Andy was with him, and Andy was . . . buried about up to his waist. He wasn't hurt. But he was there. He saw the whole thing. And it was a case of, the chance was taken that shouldn't have been taken. We've all taken them in the mines at one time or another and gotten away with it. And Phil just didn't that day. So we shut the mine down for a day after that happened—sent everybody home for the remainder of that day and, I think, the following day.

It's dangerous every day, and no matter what you can do, how many regulations and laws are enacted, there's always going to be that element of risk there. Although most times, at least the fatalities that I've been involved with, I'd have to say every one of them was that the guy just screwed up. He wasn't really watching what he was doing at the time he was killed. You know when Phil was killed—again I won't go into details what he was doing—but I've done it, too. Not everybody, but the engineers and geologists who work there, we stuck our head in the same place he stuck his.

Phil was well respected in the community. He was a good guy to work for. All the guys respected him, and he lived in town. He was quite active, although he wasn't a drinker: he was never in the bars, but he'd go down there and stop in and have a Coke and chat with the guys once in a while. But he was always willing to help them—overlook some times when two or three of them were blasting back from Billy's whorehouse up by Mina and had a flat tire and got to shift late or something like that. He was always willing to overlook that. He was more than fair. He knew miners. He had been one at one time so he understood them, and everyone respected him for that.

His funeral was in Silver Peak down in the community center, and a minister came from Tonopah to preside over that. About ten of the guys, the underground miners, showed up at the funeral with their diggers on—such as the clothes that they wore in the mine, with their hard hats and mine lights and everything. That was a sign of honor. They sat in the front row. And if you would have taken those guys and told them any other place that they had to sit—in the back rather than in the front row—they would have run out of the place. They came up and sat right in the front row, and they presented something to Sandy Lapp, Phil's wife.

Well, it [the bond between miners] has to do with something you put up with every day working in underground mines. Underground mines are much more dangerous than open pits. In open pits you generally don't have anything that falls on your head. In just about every place that I have worked, every underground mine, there has been at least one person killed. And it's always something that just jolts you back to reality and makes you realize your own mortality. It just .... I mean you go down there everyday, and you're very careful, but yet you take chances and risks that you know you shouldn't be taking sometimes, but you get away with them. And then somebody who's your friend or somebody you know well ends up not getting away with something or killed because of nothing he did, just something that happened. And it always brings you back to reality really quickly.

#### VIVIAN BARTAK: CAN'T TRUST EVERYONE

Vivian Bartak grew up in the mining town Contact, Nevada, and as a young girl, lost the tips of several fingers from an accident with blasting caps. She arrived in Silver Peak with her family in the 1960s. Her husband worked for Foote Mineral Company, while she raised five children—Patty, Sylvia, Georjean, David, and William. She first worked part-time at the post office and then became Postmaster in 1993. In Vivian's oral history interview, she described small-town problems that match those facing many larger towns today.

I came down here in 1967. We moved down from Idaho. We farmed. Oh, farming is hard work, and you never make a profit. My brother Joe was working for Elton Parsons. That's when Elton and Jewel Parsons had Coaldale,

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and he had this construction company here. Then my husband George came down to get a job down here, and he went to work for Parsons first. Next he went to work for ... then it was called Foote Mineral, and I moved down in the fall of 1967.

Then in 1969 they said they needed somebody to work at the post office, and I had already worked at the post office at Contact, Nevada. And so I went to work here as a parttime, flexible clerk. Ruby was my boss. Blanche Dalinski was the other clerk, and we had the post office in that little building.<sup>6</sup> It was cut off in the center, so the front part was the



Vivian Bartak. (Photograph by Victoria Ford.)

lobby. We didn't even have a safe in there. We just had a square box that we had to lock. And we worked in there until 1976 when they moved in the trailer.

Well, I was raised in Nevada, so Silver Peak was just another small town. I liked it. They had a bunch of tramp miners here when I first moved here. They worked for the Mid-Continent, and my brother was one of the miners. There were quite a few people who lived here. There were a lot of miners that lived here. It was busy when I moved here. Cyprus had their crew, and after Mid-Continent moved out, that's when Sunshine moved in, and they opened up and closed. The third time when they opened up, they were working real strong. My son David was working up there in 1983.

At first my husband and my brother were living here, and they were living in Frances Chiatovich's house. They rented it. Frances was living over in Gabbs. And also, my brother-in-law, Joey Bartak, was living down here then, too. Then we got a trailer and moved up to Foote's trailer park.

My husband, when he first went to work here, he was an operator. He worked from 1967, and then he got sick. They made him retire in 1982, and he passed away in 1984. He had worked up around lithium a lot, and he had inhaled a lot of that. He fell the one time, and I had to take him in [to the hospital], and they had to go into his chest so he could breathe. After that he just started going downhill . . . . when he passed away they told me that he had breathed a lot of that lithium in.

#### Postmaster, 1990s

Ruby retired in February of 1992, and James Frayne was the postmaster. He was officer-in-charge from February until June of 1992. Then, when he made postmaster, he bid out of here in April, and I was made officer-incharge. And then in October of 1993, I was made postmaster.

At different times I'd go into Tonopah and fill in if they needed workers there. And when I was in there, I would ask them to teach me all the new things. We didn't have express mail out here, but when I came back from working in Tonopah, I told Ruby, "We're going to do express mail, and I'm going to show you how to do it." And that's when we started doing express out here. It was probably in the eighties. And we have priority [mail]. We do an awful lot of priority mail now.

This Friday we're supposed to get a fax machine in and also the machine for using credit cards. One thing with those credit cards, it comes right back whether they're good or bad. Not like checks, because last year I had four checks bounce. We didn't take checks for a long time here at the post office. And now that we accept checks, why it was a shock to me that somebody would write a check to the government and have it bounce.

When you work for the post office department, you have to go by their rules and regulations on everything. If you have a box rented, you put the notice in on the first. If it isn't paid by the thirtieth, you allow them ten days. And if they haven't paid within that ten days, you close the box and take the mail and put it in general delivery. And if it's in general delivery for thirty days, and if they still haven't come, you have to send that mail out. We have some people that will leave and never leave a change of address, and we can't do anything with their mail until their box rent comes due. But we have some that have a box, but they never come to pick up their mail. They go four, five, six months at a time without ever picking anything up.

There's no door-to-door delivery here. Sometimes when someone gets express in and if they can't get to the post office to pick up, I have delivered it. We had some Lange [company in Arizona and California] drillers here the one year, but they couldn't get in to pick up their express. That's how they got their checks was through express, so the boss asked me if I could take it and the paper that they had to sign with me when I'd leave at night, and they'd pick it up from me. I'd usually have to meet them, and I'd just lock it in my car. They'd be working way out on the lake, and they couldn't get in. I did this for quite a few years.

Well, when Harbert Yeargin was here, I stayed open every Friday night, so they could come in and make money orders. Every Friday night those men would come in at five, and I wouldn't get out of there until six thirty. When I went to my one meeting, they said, "Are you putting that time down?"

"No," I said, "Postmasters are supposed to donate something to the community, and me staying at the post office and doing that is for the community." Well, that was their payday. And old Fred, he would go to town and bring the money out for all of them to cash their checks. And I said, "Well, Fred, you can go in there and get all that money and bring it out here. For 247

them to be able to come to the post office and get money orders, I'll stay open." [laughter] I'd stay open so that they could send them.

However, a postmaster has to be very careful, because if you're too friendly with some of the people, they'll try to get you to do favors. When you work in a post office, you cannot give out any information. You cannot give out any box numbers to people. You've got to be able to have customers that know that they can come in and trust you and get a bunch of money orders—that is nobody's business but that customer's, who he sends money orders to.

Well, I'll tell you something, there are some people [in Silver Peak] that I feel I can rely on, but there are some that I just wouldn't. I hate to say this, but this community is just like drug city. Drugs are very bad here. There have been busts here. It's been a problem since . . . oh, it's been a problem since in the 1970s. It's just as much here as it is in any other small town or even in the big cities.

#### Fourth of July Parade

The only thing they have here now is [the parade] on the Fourth of July, like [last year was] the first Fourth of July that the post office put in a float. Junior Toner [Glen Toner Jr.] and Doug Tockey did the pony express on two horses. We had Doug Tockey's old vehicle, red one, and we decorated it up, because the post office was 130 years old here this year [1886 to 1996]. We took the blue ribbon. The pony express, they got the red ribbon, a round plaque, and a silver platter. But they insisted that all the prizes had to go to the post office, because it was for the post office that they'd gone in [the parade].

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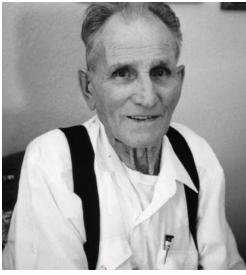
# ELMER T. "HEFTY" SANDERSON: I MADE THAT TOWN

Miner turned entrepreneur, E.T. "Hefty" Sanderson owned and operated The Black Mammoth Bar, Restaurant, and Motel in the 1980s. Sanderson had worked for Merle Swanson at the Mary Mine before opening his business, so he understood the mining industry. While in Silver Peak he served as Esmeralda County Commissioner, and after returning to Hawthorne he was elected sheriff of Mineral County for four terms.

When I first came to Hawthorne from Montana in 1948, I started working for one of the contractors. And after I worked with them for a while, why, I bought a dump truck, and then I hired it out to the company. They were building all of those ammunition bunkers and roads.

Before I went back over to Silver Peak, I got married to a lady, Alice, that had five kids. She went over there with me, took all of the kids. I had a

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Elmer "Hefty" Sanderson. (Photograph by Victoria Ford.)

home here in Hawthorne when I went over there, and so I sold it and used the money to establish a business in Silver Peak. I bought that property off of [Jimmy] Gavin. I knew Jimmy for years before he got sick, and then he just didn't feel like he could operate anymore over there. He had what they called the Shifting Sands Bar, and so I bought that off of him and [his wife] Marie. Well, it was kind of a snack deal-not a full-fledged restaurant. But I bought the property next door, which was the old Black Mammoth Bar, and it was a good-sized building. I did a lot

of work on it first and then opened it up with a restaurant and a bar. And so my wife and I, we operated that.

Then I bought some modular units new in Tonopah and moved them out there, and that gave us six units for a motel. Then Harvey Humphrey had the gas station, so we bought that off of him. That left us with a bar and a cafe and a motel and a gas station, so we had just about everything in Silver Peak. I came to Hawthorne and bought a big three-bedroom trailer unit, and then I moved it out there, so that gave us a place to live. I put it up alongside of the bar, where I could just go from one to the other.

Foote Mineral was there when I was there. There was quite a bit of mining, too. There were several little properties that they were working on around, and they were working on the Mary, and Foote Mineral was in there on the lake, and it was a pretty thriving community. Mining was really pretty constant then. There'd be a mine start and then work for a while, and then it'd close down.

I used to borrow \$25,000 a week for the guys who'd come in to my place and cash their paychecks rather than have to take it to Tonopah or someplace. And then that's where they'd spend the money. I thought that was pretty good, that I was able to borrow \$25,000 a week.

I bought some steers at the sale in Fallon and took them to Silver Peak and grained them, gave them the oats and corn and all the hay and stuff that they wanted. And I got them really in good shape. Well, I took them back to Fallon and had them butchered one at a time, and then I put on a free barbecue for everybody in the country. We had hundreds of people coming out there for a barbecue. That came easy for me: I'd done a lot of cooking anyway. When I was in the army, they sent me to cook and baker school for a couple of months.

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I did that two or three times and got lots of people. If you want to get a lot of customers, cook them up a nice big meal and give it to them. You had no trouble getting customers. I liked to do it, because I had lots of friends, and I liked to take care of them.

I had those businesses about fifteen years. And then my wife decided she didn't need me anymore, and so she took up with a truck driver and spent my money on him. So then I had to leave Silver Peak. She got the businesses when we got divorced. Well, I didn't contest anything: I just gave her what she wanted. And it was kind of a sad deal, because I . . . I really liked her. And I thought about shooting him. Then I thought, "Well, if she didn't like it, I'd probably have to shoot her, too." [ironic laughter] I decided that wouldn't be the logical thing for me to do, because I'd wind up in jail. So I just left and gave her everything.

But it used to kind of gripe me to go into the bar and the cafe that I made, spent my money for, and have him sitting in my office counting my money. And it was about all that I could take. I carried a gun in my pocket for a week thinking about it, and then I finally just gave it up. It would have been a poor thing to do.

I still like Silver Peak. It was off to itself. And I actually made the town, and I just kind of hated to give it up. I had enjoyed my time while I was in Silver Peak, but I had to do something to get my mind off of Silver Peak and off what took place over there, so I started in different things.

Notes

1. He funded a two hundred-ton mill in Silver Peak, which reopened in 1957 with a five hundred-ton capacity *Tonopah Times Bonanza* and *Goldfield News*, 29 November 1957. On 18 April 1958 the *Times and News* reported a gathering to watch gold and silver bullion ingots poured, valued at \$7,273.

2. A garden tramp miner is one who changes jobs frequently to learn new skills but prefers to stay in one state. Ford, Ben Viljoen oral history, 197.

3. The Mohawk silver mine was owned by Stanley Chiatovich, Ernest Shirley, Harvey Humphrey, and Louis Shirley and was leased in June 1959 to U.S. Milling and Minerals Corporations of Chicago. *Tonopah Times-Bonanza* and *Goldfield News*, 6 November 1959.

4. The cave-in was reported in the Hinds 202 stope of the Mohawk Mine on October 15, 1959, with reports about the disaster and the rescue efforts in the *Tonopah Times-Bonanza* and *Goldfield News* on 23 October and 30 October 1959. An investigation report was published on 6 November 1959.

5. Air doors control the ventilation in the mine.

6. The little one-room, wooden house was still in Silver Peak in 1996 and sat next to the newer-model mobile unit that served as the post office.

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# 10 The Future

In recent years Nevada climbed into top place as the nation's gold producer and third place internationally, thanks to the Carlin Trend discovery. This new wave of mining is for microscopic gold. Computerized mills, reams of regulations, women underground, giant equipment operating both underground and in open pits—1990s mining has ranged far beyond the wildest dreams of 1930s miners. With all these changes, what lies in store for a small mining town like Silver Peak?

As in other parts of the state, advances in technology brought renewed interest in older gold properties in the Mineral Ridge Mining District. While the price of gold was still over \$300 an ounce, the Mary, the Drinkwater, and the Oromonte once again looked promising. Mineral Ridge Resources, Inc. (MRRI) opened up the area and hopes were high for another bonanza. However, by 1998, falling gold prices pushed comparatively small operations like MRRI to lower their overhead as much as possible—some cutting jobs, some folding.

The town of Silver Peak has survived borrasca before. As of 1996, jobs with MRRI and Cyprus Foote Mineral (still open after almost forty years of operations) created a good local economy and were building the much-needed bridge into the future. Once again, these companies were made up of individuals, many who loved The Peak and worked hard keeping the town alive. The following oral histories show how strongly the past continues to be tied to the future in the mining industry.

Ben Viljoen, MRRI mining engineer and Esmeralda County Commissioner, received his training from the old-timers and serves as a living link to underground mining of the past. General manager at MRRI in 1996, Tom Rinaldi, described himself as a 1990s tramp miner and stayed in Silver Peak long enough to establish the new open-pit mining operation. Not long ago, the MRRI operation was sold to Vista Gold Mining Company. The project continued under the leadership of General Manager Hank Lesinski until the property was acquired by Golden Phoneix Minerals in 2000. Finally, Ed Tomany recalls Pat Chiatovich's gold, which he hopes will finally be located by MRRI operations.

The Future

# BEN VILJOEN: KING OF YOUR STOPE

Ben Viljoen [pronounced Fay-une] keeps one foot in the past and one in the future. His roots in Nevada have grown deep from the time his grandfather immigrated to America from South Africa and settled at Lake Tahoe. Ben was raised around the lumber industry but as a child thought mining was more exciting. In his oral history he explained his training to become a top-notch tramp miner. He also described how his life changed as the underground mining he loved disappeared in favor of open-pit mines and government regulations. Although he learned the new ways, he was still hooked on underground mining where a man could be king of his stope, and he is still hooked on collecting stories about the way things used to be.

## Job Training, Underground

I think my first job mining was at the Utah Mine in Virginia City when I was about thirteen, hand-mucking during the summer, so I got to be away from home and get paid, and it seemed just too much fun. Oh, I loved it. After setting choke in the woods, and my uncle paid in candy bars, and these guys paid real money, that was something. [laughter] Well, my folks begged and pleaded for me to go to UNR [University of Nevada, Reno], but I convinced them that it'd be a good idea to get some practical experience first. I just tramped around from mine to mine, mainly working underground. As one mine shuts down, because the price of the mineral goes down or else they work it out, I'd just gather up and go on to the next one. And it's a never-ending cycle.

Ninety percent has been Nevada, mainly because I'm what they refer to as a garden tramp or a tri-county tramp—not the guy that goes from coast to coast. If there's any jobs in Nevada, I'd just prefer to stay here. But from time to time, I had to leave the state to round out my skills. The shaft jobs were in Arizona, and I wanted to know more about shafts, so that's why I migrated down there for a short stay, and then up around Liberty in Washington to mine underground placer, because that's something I hadn't done before. So it's just moving around all the time.

For an underground miner, before you could call yourself a contract miner or a real miner, it takes about ten years of practical experience and moving around a lot to learn all the different jobs. It's not just me. That's what it takes for everybody. Or you could just stay at one mine, which those guys are referred to as a factory tramp. But then you don't have the rounded background. Each place is different. The ground is different. Even up and down the Comstock the ground is different in almost every mine.

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First of all, underground is a trade, where open pit is just construction just basically laborers. Underground, you work your way up through the ranks. There are a bunch of different trades you can pick up. Some guys become a timber man or a tunnel stiff or a shaft hand. If you learn it all, you become what they call a contract miner, where you go out and you bid the work.

You start out on the surface as a top lander. That's the guy that is just basically a laborer on the surface, digs ditches, moves the timber from the timber pile over to the cage to lower it down underground. From there, you can become a hoist man (some mines call it an engineer) or a mechanic or a framer—the guy that actually cuts the timber into the sets.

Of course, if you want to go underground, then after you have enough seniority, you can go down. You start in as either a nipper or a skip tender. Nipper is the guy that's basically a laborer. He hauls the timber from the cage to the heading the guys are working in or moves powder around or breaks boulders on the grizzly or just all the grunt work that takes place. In the bigger mines they have a cager, which is basically an elevator operator the guy that rings the bell codes up to the hoist men and makes sure that everything is right on the cage so you don't have timber falling off. Or a skip tender, like at the Mohawk where we used a skip instead of a cage, is the guy who dumps the muck from the draw points into the skip, and that's his job all day long—to just keep filling the skip every time it comes down and to bring it up.

From there, hopefully, you would meet up with somebody that would like you as a miner's helper or a nipper in the heading, because the miners always work in teams of two. They're paid some kind of a minimum wage, and then everything else is contract. You're paid so much a foot or, if you're in the stopes, so much a cube as incentive pay. After being a helper, then you start learning how to drill a round and how to load it, how to timber everything that's involved with that. And once you think you have that pretty well figured out, well then you bid into the raises or sinking a shaft.

The first miner I worked with—he and I really hit it off—was Steve Cate from Mina. Once in a while you click with somebody... just something where you know what the other guy's thinking, and he knows what you're thinking, so you don't have to stand around and compare notes: you just get the job done. And he and I tramped around together for, gee, quite a few years. He was one of the best hands I ever worked with. Every mine we hit, we usually pegged the board. They always keep a board showing who's making the best gyppo, the best contract money. [laughter] When the company pays you by the foot or by the cube, they're always trying to gyp you on the amount, on the measure up, so it's referred to as gyppo, and we were usually right at the top.

Mining's different than any other industry. Any other job, you hear people saying how much time they were able to hide out from the boss, where in mining you hear everybody bragging about how much footage they got, be255

cause if you goof off you're not only beating yourself out of money but your partner besides and the shift following you.

I worked with all different characters. I was real lucky. I hooked in with . . . they're nicknamed the Pirate Crew. They're a pretty horrible gang: they would always end up in jail or a bar fight or something. But they were famous throughout the West as the very best in the business. Whenever we hit a mine, the reputation goes ahead of you, so we always had to keep up our reputation. We always did very well. Let's see, there's K Bond and Drunken Duncan, June McKnight, Screaming Beaman, Three-Finger Gunner, Johnny Nickelbee, and Suitcase Simpson and a few more guys that ran around in that clique. Most of them are retiring or "stoped-out" now—too lunged up to work anymore. The con. Silicosis.<sup>1</sup>

#### Silicosis

I don't think I have any problem with silicosis. I can't breath like I used to, but I think that's more age than anything else. But today, we water down our muck piles. We use wet-headed machines and water everything down, where in those guys' days, they didn't know how to fight the silica dust, and they had dry machines. That silica is what they make glass of, and it breaks down into razor-sharp, little particles that just scar your lungs all up. Your body thinks that it's dust, so it keeps pumping in more mucus. Finally, a guy just drowns in it or dies of pneumonia.

Most guys are conned to a certain extent, but all the old-timers I know have died of it, to one degree or another. There's an old guy in Mina that just used to cough up blood all the time. It was just horrible. You'd go into the restroom, and the urinal would be coated with blood. John Cate, Steve's dad, died of it. They had him on oxygen, and he just slowly suffocated. Anyway, that's why most of them are gone. It's a horrible way to die. Often they say it's just bronchitis, because miners are the very toughest of the tough. You aren't going to let a little particle of dust take you down. [laughter]

#### Underground Versus Open Pit

It's only been here recently that I've had to work in [open] pits. That probably will change back again as things evolve. See, it doesn't take too awful long to work out an open-pit mine, and so the next step is to see what's down below that. Did the old-timers mine it all out or not? According to the old-timers that are still around here, it was the War Board that shut every non-strategic gold mine in the United States. The last day the mine operated, they had all the ore they needed to keep the mill running, and they felt it was a real rosy-looking future.

I like underground, because it's very, very highly skilled labor. Miners are just a breed all their own. Open pit is just glorified construction, dirt moving, where a miner has to know what he's doing all the time. You're king

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of your own stope. You mine it, and nobody tells you how you're going to do it. It's hard to describe, but miners all have a great pride in their work, and I just enjoy being a part of all that.

Underground mining, that's the greatest life there is, because most of your pay underground revolves around contract prices. The company determines what a drift should cost to drive. So they'll pay you your day's pay plus so much a foot to get the job done faster, and so if you're a good drift hand, you can make double or triple a day's pay by producing that much more work. In a stope, you're paid normally by the cube, how many cubic feet of ore you knock out. Or if they're really worried about grade control, they'll pay you by the ounce—so much an ounce to keep the grades up real high.

Everything changes, and you've got to change with the times or end up like the whalers! [laughter] To change from underground to open pit, everything's completely backwards. Underground, you get under the ore body and work your way up. In the pits you start on top and work your way down. There are a lot of adjustments, but it's still mining, and everybody likes moving dirt around. We're all kids at heart.

Well, underground mining is picking up again, up north in the Carlin area, and they're finding that you can only, efficiently, open pit to a certain depth. Pretty soon your stripping ratio comes up to a point where it's no longer affordable, and now there are mines that are going underground.

#### The Mary Mine

In 1989 when I came back to Silver Peak for the second time, I worked with Zephyr Resources under Rory Tibbals, who was the grandson of the Tibbals that you see on the old mine maps at the Mary. At the time I was working for Art Wilson Company, which became Homestead Minerals, out of their Silver City office. And they were thinking about, maybe, a joint venture or something along those lines with Zephyr Resources. So Steve Russell, a very well-respected geologist, was sent down to have a look at their ore reserves. They had me tag along to look at the pit from a practical or mining standpoint, to see if things were being done the right way.

When I got here, they were having a heck of a time with grade control. Their mill heads weren't anywhere near what they thought they ought to be, so Rory asked me if I would stay on, still working for Homestead but under him, to try and solve some of their grade-control problems, which I did. From there, eventually, Zephyr Resources' holdings here were bought out by Homestead. Of course, I was already working for them, and I just stayed on. At that point, they made me pit foreman under John Tully, who was the pit superintendent for Zephyr. And, of course, he stayed on with Homestead. They didn't change the people around, just the management.

As pit foreman, I was responsible for everything that goes on in the pit. The superintendent pretty much stays in the office and makes sure that everything is going according to the mine model and the mine planning and 257

that MSHA's happy and all of that. My job was to stay up on the hill and make sure everything was going according to plan. It's like a chess game. Everything has to be done in the right order and the right timing, so the superintendent's job was to make sure that everything was balanced between the mine and the mill, and he was constantly in touch with me to let me know whether we were falling behind in one area or getting ahead of ourselves in another area, or if we were doing something that, of course, the state or federal inspectors would be against.

Later on, John was offered a lot higher paying position. He moved on and they decided not to fill the superintendent's position, so I was stuck with the whole bailiwick. I believe I had forty-eight men working for me, including the surveyors and everybody that was in and out of the pit—geologists and all of them, which those groups are kind of working for themselves, but someone's got to keep them pointed in the right direction.

#### Women Underground

We did have two gals working up there—one on grade control, and another was a surveyor. Underground in the 1930s... miners are very superstitious, and women underground was a taboo, which has changed today. What's happening today is, they have to hire a certain number of women underground. In the early days, those jobs that didn't take a lot of physical strength were given to the old-timers—feeling that the old-timers, even though they couldn't produce physically like they used to, they had those little pearls of information to pass on to the young guys, so the information kept rolling. Where today, hiring women, they have to put them into hoistman jobs and things that, even though some of them are as strong as a bull on the average, requires less lifting and strenuous-type work. So the older guys, say after age forty-eight, most of them can't buy a job. That's the reason there are so few of those jobs that are for somebody that doesn't have the strength they used to.

But now there are positions in the mines where women excel, say, in a hoist-man position. That's something that's very high pressure, and everything has to be done just exactly right, or you get somebody tore up or equipment broken. On the average, women are very patient, and they make sure that it's done just exactly right. They usually make darn good hoist men. So I'm not saying they shouldn't be underground, I'm just saying this is a problem in the industry that somebody will figure out a solution to, and then everything will be fine.

Well, finally Homestead Minerals went under. It wasn't because of the mine or the mill. The mill had the highest head grades in the state while it was operating and the lowest cyanide consumption and some of the highest recovery—as far as I know, the highest. We averaged about a ninety-six to

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ninety-eight percent recovery in thirty-six hours, so that's something pretty incredible. The crew were just crackerjack hands.

But the hierarchy of the company felt that they ought to be making very important decisions regarding the pit from Carson City and Reno . . . And then, a lot of the profit was being pumped into outside schemes. They were financing some tire-shredding deal, where they were going to squeeze oil out of old tires for diesel and then use the shredded rubber to add to asphalt for highways. Probably a good idea, but the mine needed exploration drilling. We didn't need a tire-shredding machine.

Small Business

From there I started my contracting business back up, which I always do when times are tough. [laughter] If you can't find a job, you go make one. Like when mercury died off, scheelite came up. So I went to work for some scheelite mines around Gabbs and did some leasing around Gabbs: it depended on which one looked like it would pay the best. It's just always been like that, but in recent years there's no minerals worth mining other than gold because of the prices and imports.

My business was as contract mining, contract underground work, to dry drift or re-timber—just basically anything that anyone wanted done underground. I did hire some people. It fluctuated a lot from just me up to, I think with the highest, about thirteen guys working. We were doing two reclamation projects.

The worst possible example [of problems for a small mining business] has to be the SIIS program, the state industrial insurance. Before it was called N.I.C., and it was the pride and glory of the whole union [the United States], because they had a huge surplus every year. Everything was taken care of quickly and efficiently. I don't know what happened that they decided to rename it SIIS and bring in a bunch of new blood, but the thing has just completely gone down the drain to where it's just a bureaucratic nightmare. And the paper work we had to do. I had to have a full-time accountant, not just take care of that, but that was probably . . . figure, two work days a week would be strictly to SIIS.

They couldn't really comprehend the fact that one week you might have ten employees and the next week one. One pay period a guy's getting paid twenty bucks an hour to do underground work, and then the next pay period he may be working on the surface and getting ten dollars an hour. Well not ten, but fifteen or something. And that just takes reams of paperwork. By the time you got that turned in, the guy's making twenty again, and it just turns into a bureaucratic nightmare. It's set up more for the casino worker that gets minimum wage forevermore and that's that. And then their rates are so unbearable, 24.75 percent for underground. The next closest is California which is around 10 percent. Arizona and Idaho are around 4 percent. 259

So if I was to bid a job, I couldn't come near anybody that's bidding from out of state.

The first thing the SIIS people say is, "Oh, they have to carry Nevada coverage." Well, they have to after they get caught. By then, if there's a little job, they're done and moved out of the area. And that's the kind of stuff I was geared for, small jobs.

Maybe it's not any one bureaucracy in particular—just so many from every different direction. Well, the BLM . . . . Here lately, since the guys in Nye County shook him around a little bit, they're a lot easier to get along with. But you still have to take them out and babysit them and parade them around. Meanwhile, this is taking you away from your work. And show him what you're doing; what you should have done and could have done and would like to do—and it drags out to a whole day. You can't just say, "OK, this is it. See you." If they drive all the way out there, they expect to hang. They don't want to make it back to the office in time to have to do something else.

Well, the state . . . I should throw something in for the state mine inspectors. These guys are, of any bureaucracy, these guys are just what I'm sure the people who came up with bureaucracies had in mind. Our guys with state of Nevada are just 110 percent. You've got one guy covering the same area as five MSHA inspectors. They do all the training—or they're capable of doing all the safety training—free, absolutely free. They'll lend you movies, help you out. You can call them up in the middle of the night for some kind of suggestions and stuff. (Well, you could. I don't want to antagonize them.)

Their guys, when they're hired, they have to have a certain amount of underground experience and a certain amount of pit experience, so you can actually rationalize with them. "I know we aren't doing this quite to the letter of the law, but here's the reason, see. We plan to do this so that we can do that, which will make the whole thing safer." Where, the MSHA guys come in . . . this is some guy that might have worked in a coal mine in Virginia or just got out of college. It's just getting worse and worse. You show them the mine: they really don't comprehend what it is they're looking at, but they know that the rule says, "You do this, and you don't do that," and down the line. And you're trying to explain an elephant to a blind man.

With the safety training, MSHA, as far as I know, doesn't offer anything. They used to give out pamphlets and movies. They don't even do that anymore. But the state—your guys have to have a refresher once a year, and that involves four hours of first aid and so many hours of this, so many hours of that, which is all federally mandated. But the federals say you just have to do it. How you do it's your business, where the state will send in EMTs or somebody that's certified in mine gases, just the guy for it. And they don't charge you a nickel for it.

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And then, if you have a problem on the mine site, you can call them up and say, "Boy, oh, boy. Now this is off the record, but we've got this weird problem going on."

And they'll say, "OK. Well there was a mine in this area that did this, and a mine over here that was in that situation. They did that." And they'll actually help you out. [laughter]

When I first started leasing and stuff, the bureaucracies were 100 percent behind the little guy, without stretching the law, without making loopholes. One thing I just loved about the mining profession as a kid was the whole idea that you could go out into the mountains and just make a fortune, that the possibility was there, where today you're just strangled to death by every type of a bureaucrat imaginable. Most of them serve no real use for the public or the animals they're supposed to be protecting. They don't produce anything, and they're just absorbing most of the budget of the whole company.

My little company, when I gave up on it . . . Well, I was still kind of stumbling along, but I had a full-time job doing paperwork. If I was doing paperwork, I couldn't be mining, but if I didn't do the paperwork, I'd go to jail, so I couldn't do both. There aren't enough hours in a day. And there isn't enough profit in it to hire somebody to play around and do paperwork all day. So it's a real Catch-22. The bigger companies can afford to have a land man that just pampers all the bureaucrats and keeps them happy, and they're working a whole bunch of different projects, so it pays off. Compared to the small guy who's working one mine, and he doesn't have the money to fight the bureaucrats. Like a bigger company can scare them away. They [bureaucrats] want to impress their boss, so it's a lot easier to tear up a little guy that can't afford to fight back. So you see, a lot of the ma-and-pa-type mines are falling by the wayside.

Mina, when I first was working out in this area, was a booming little town. The railroad was in there. There were bars, cafes, stores—everything that makes a town work—and just rip-roaring all the time. A bum couldn't hitchhike through without getting captured to go to work at some mine someplace. And now the poor place is all but a ghost town. Well, the EPA [Environmental Protection Agency] has shut down all those mills, because their tailings ponds—even though they've been there a hundred [years]—all of a sudden they have to bring them up to modern code, right now, tomorrow. And, of course, the operators just didn't have the money to do all that, and so all the mills are shut down, and the rail was discontinued. The backbone of the town was the custom milling business, and so that was the end of the hump for Mina. But we'll see what the future has.

#### International Versus U.S.

Well, another thing I hate to see so much is that we've got an expertise that has been developed well over 100 years, close to 150, that's all going 261

out of the country now. But most of the companies, other than a few junior companies like this, are putting a few token geologists in the field to make it look like they are still active in the U.S., while they're all going to Chile and Africa . . . . And those people don't want to just give away their environment, but they want the technology, the jobs, and the assets that are produced. Where before, the hub for the industry was Virginia City. That expertise went to Tonopah, back to Virginia City, and then it went from Virginia City to Goldfield and back to Virginia City. It stayed here [in Nevada], and it helped the whole area. And now it's just flooding out of the country.

In South Africa today, they feel that selling their technology almost represents half of their gold income by doing consultant work on deep mining for other countries. But here, this country, it's pouring out. The biggest joke in the business right now is, "What do you call a roomful of geologists? Spanish class."

I've been offered a couple of jobs in China. Seemed pretty fun, but I kind of wanted to see how the Mary Mine turns out.

#### Silver Peak

The people here are real nice and all seem to work together toward things. They have their little squabbles about who has the first float in the Fourth of July parade, but as luck would have it, everything works itself out. So there's a lot of camaraderie here that you don't see in other towns.

It's also a lot easier to get snarled up into the local politics and the fire department and things like that. Here, you're right in the thick of it, because you've got to pitch in to make it all work. So after it does work, then you feel a little better about yourself—you could've laid at home and watched TV but got involved instead.<sup>2</sup>

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#### THOMAS R. RINALDI: MINERAL RIDGE RESOURCES, INC.

Tom Rinaldi was General Manager of Mineral Ridge Resources, Inc. (MRRI) in Silver Peak, Nevada, in 1996. He was in the process of finalizing the permitting process, overseeing construction, and planning for an open-pit, heap-leaching, gold operation. Rinaldi gave a unique perspective on history in the making—a glimpse toward the future of historic Mineral Ridge Mining District properties such as the old Mary, Drinkwater, Gordon-Brodie, and Oromonte mines, including the improvements reclamation will leave behind. Rinaldi described himself as a 1990s tramp miner. He has a degree as a mining engineer, learned about underground and open-pit mines through firsthand experience, and changes jobs every two to three years, primarily to gain new experiences and seek opportunities for career advancement.

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#### 1990s Miner

I'm basically a tramp miner. I'm not the old underground tramp miner. I'm just the 1990s version of the tramp miner, as it were. I'm here for a couple of years, there for a couple of years. I won't say it's because my foreman upset me, and I'm not going to work for him and just leave, like people used to do way back when, but it's opportunities and things like that.

Thomas Rinaldi. (Photograph by Victoria Ford.)

I'm a mining engineer. My first job was as an under-

ground foreman in a large copper mine in Arizona. After that, I came to Nevada to get into the gold business, because it was intriguing to me. I've worked as a foreman. I've worked as an engineer, and then I've gone into the superintendent and management positions. I went into mining because it was a nice outdoor job, and I didn't want to be stuck in a building at a desk job. Now it appears that is about half of my job. [laughter]

I finished school at the University of Arizona in 1983 with a B.S. in mining engineering. During the years I went to college (when I wasn't in college), I was working as an underground miner in Colorado. I quit school for a couple of years to work, so I did get a job as an underground miner and fell in love with it. I was a development miner. I did raise mining. I did drift mining, rock bolting, mucking—pretty much everything that an underground miner does. I was in a modern mine by today's standards: it was all rubbertired equipment. We did not deal with the small, rail-type environment. It was all very large, high production, so it was a modern mine by those standards. In the mine where I was, we had 300 pieces of diesel equipment underground. We had about 300 miles of drift. It was huge, bringing out 32,000 tons a day. We're going to be producing about 28,000 tons from an open pit here.

I spent one summer at an open pit, a strip coal mine in the outback of Australia. I spent one summer in a copper mill as just a laborer—one day on a shovel, one day on a hose—you know, that sort of thing, just grunt work. And then I spent one summer as a haul truckdriver at a copper mine. So those three summers were all surface-type environments.

After I got my degree, then I went to work for Magma Copper Company at their San Manuel operation in Arizona, about fifty miles north of Tucson. At the time it was, and I think it still is, the largest underground mine in 263

North America. The first mine I worked at, our ore came out via a tunnel. This one, we had to hoist everything through shafts, and we were hoisting 66,000 tons a day—more than double what the other one was. It was a low-grade copper mine, 0.65 percent, which by world standards is low, but it's very good grade for the United States.

Very rewarding job; a very frustrating job. Well, front-line supervision can be very rewarding, because you're given a goal on a day-by-day basis, and it's between you, your crew, and the mountain (so to speak) to get that job done as safely as possible, as cost effectively as possible, and just to meet your production goals. The frustrating part about it, it was a forty-year-old company with 5,500 employees. Politics were horrendous.

When I was in the copper business, copper was in the doldrums. We're talking fifty-eight cents, sixty cents a pound, sixty-five cents a pound. And, basically, my wife and I, we really wanted to get into the gold business. And we had an opportunity to come north on a family silver venture, which was the wrong thing to do. Spent a year doing that and spent a lot of money, lost a lot of money. [laughter] And decided to get a real job again and go back to work. Through some people I knew from working here and there, I called around and found a new project that was opening in Austin, Nevada, and got a job there as a foreman. I was there two years. It was one of those projects that was supposed to be a three-year project with eight years of potential that lasted two and a half years. [laughter] It was a very hard ore body, and I guess hindsight would say it should have been left there. The company didn't make money on it.

From there I went to Hawthorne, Nevada, working for the Aurora Partnership. I was again a senior mine engineer, and then was promoted to chief mine engineer in the two years I was there. Another small company. There was not a whole lot of upward mobility, so after two years I started looking again. I could have had a job there for close to ten years, but it would have been the same job, which, I mean, there's nothing wrong with that, but I had different ambitions.

Next I went to Ely, Nevada, as the mine superintendent of another operation that was opening up, small operation again. From there, I got a job back in Hawthorne with a company by the name of Nevada Goldfields, a very small, gold-mining company. It was an underground and open-pit operation with a mill. Prior to this I've been bouncing back and forth between mills and heap leaches. Most of my experience is heap leach, but I do have some milling background also.

Then another company made me an offer I couldn't refuse, and that was in Goldfield, Nevada, just thirty miles east of here, so I took that job. I was there about a year and a half in Goldfield [when] Cornucopia, which is the parent company of Mineral Ridge, started looking at me. For a little bit of stability for my family and the intrigue of building a project for myself from the desert up, I decided to stay in Tonopah and take this new job. Let's see,

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two years in Austin, two years in Hawthorne, three years in Ely, a year back in Hawthorne, and a week away from being two years in Tonopah. [laughter]

#### MRRI at the Old Mary Mine

[To start a project from the ground up...] I guess, to put it in one word—chaos. [laughter]. For example, we've tried to schedule start-up dates . . . We had a target date for the E.A. [Environmental Assessment] to be signed by July 19. OK, we missed that by a week. It was signed the following Friday, so we were real close on that one. But then you've got all these other state agencies you have to deal with also, and they all have this thirty-day comment period—and thirty days for this, forty-five days for that. And then after they say it's OK, then we've got fifteen days to write the permit, and the state is understaffed. My major argument with the state is, they'll put one person on your particular project, and if that person goes on vacation or something, it comes to a grinding halt. And that has cost us a few days here and a few days there. Now here it is September 24, and we're hoping to get started October 4, which is about two months later than we wanted to be started.

Right now we're getting to the end of the permitting cycle to get started, which has taken two years. We have a list on our wall of approximately twenty permits, plus or minus a few. Some of them are major, some of them are minor. The three, well the four major permits: You have the Environmental Assessment, which is your major plan of operation, which is with the BLM, which is the lead agency for this project. Once that is out of the way (and we're working on all these permits in conjunction with each other), then we have the three major state permits, which is the reclamation permit, which we're about ready to finalize right now, which is going to give us this October 4 start-up date. The other two major permits are water-pollution control, because we are dealing with toxic substances that we must contain, and also the air-quality permit. With those two, we can go ahead and get started mining. But in order to construct the components that those permits deal with, we have to have those permits in place first.

And then there's all the minor permits. Our solution pond has the diluted cyanide solution in it. We had to have it permitted with the Department of Wildlife. We have to have explosives permits. We have to have permits for the beneficial use of the groundwater of the state. Oh, storage of the fuels on site. We have to have the state fire marshal sign off on all our buildings. Just, you name it, everybody wants a piece of the pie. And every one of these permits comes with a fee; [laughter] \$100 here, \$8,000 there, and just about everything you can imagine in the middle. There is no permit that they just give you. [laughter]

Right now about half of my time is involved with the permitting process. After we get into operation and all the permits are in place, it will 265

require . . . I'm going to say 10 percent of my time. But we do have one person on staff whose sole responsibility is taking care of our land and our permits. Today, everything has to be governed by protecting ground water, runoff water, the soils of the area. We have to have a plan up-front, prior to moving a ton of material.

Back in the 1930s and at the turn of the century [two important eras in Silver Peak mining history], there were no environmental regulations. It was more just, "How can we best process this material most economically and then get rid of our waste most economically?" When they were finished with the material, they found a low spot, and they just filled the basin or just let it run down the hill and got rid of it.

Actually, this project is affected by the national economy in several ways. The price of gold is very much important to us. The price of raw materials fuel, cyanide, labor—are very important to the economics of this project, so we're very much part of the national economy.

Our parent corporation is a Canadian-based company, so we are an international corporation. Cornucopia Resources Limited—they're a Vancouver-based, junior mining company. We're a small mining company. This is our only operation at this point in time. Total employees right now in North America are about twenty-five to thirty people. There are quite a few other people in Africa where we're doing some exploration right now. It's nice being in a small corporation like this because everybody in the company is on a first-name basis with each other. We have to wear many different hats, which depends on what day of the week it is. [laughter] My job— I'm involved with budgeting, permitting, people issues with the employees, production issues, construction issues, God, I'm sure there are others, but . . . . [laughter]

#### Mining Equipment

During construction and in the initial days of mining, we'll probably have somewhere between 110 and 120 people here. As everything gets completed, and we settle down into the daily routine, we'll probably have about 90 employees.

The decision for open-pit versus underground mining here is solely an economic decision. Today we have much larger machines, and it's much more cost-effective to move material. Technology is continually improving, and with those improvements the cost of moving material goes down. Now today, as in the early days, we want to move the least amount of waste possible and primarily move ore. Back in the 1930s and the turn of the century, they probably moved five tons of ore for every ton of waste they mined. Now, today, we're going to be moving four tons of waste for every ton of ore we're mining [almost a reverse ratio]. But we can move it at such a cost-effective rate compared to back in the 1930s that it is still better to have a

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large open pit than to try and mine it underground. Underground mining is still very expensive compared to open-pit methods.

Today with the assay techniques, the drilling techniques, the ore-control techniques with the computers and things, we can actually be very selective, and we know exactly what is ore and what is waste. So it is actually a very selective mining method that we'll be using.

The public views it as big, and the equipment that we're using is large. The front-end loader we'll be using will handle 20 tons of ore in one scoop, and people just think of that as a tremendous amount of material. Compared to the Cord Mill when they were moving up to 500 tons of ore per day, we're going to be moving about 3,000 tons of ore per day. Total production with the pre-stripping and things, we will be able to move upwards of 30,000 tons of material per day. Of that 30,000 tons, 5,000 to possibly 10,000 tons of that will be ore, depending on what day and where we're at in the different pits.

#### Milling Technology

Cyanide technology came in after the turn of the century. In fact, the Blair Mill did use cyanide. OK, basically, theirs was kind of an open system where they just dumped their tailings. They tried to reclaim as much of the cyanide as possible, but the stuff they did dump, they just kind of sent it down the mountainside. And the tailings, wherever gravity took them is where they went. However, cyanide is a very delicate compound. Oxygen and sunlight break it down. Those tailings are anywhere from sixty to ninety years old. I seriously doubt there are any toxic levels of cyanide in them.

Heap leaching probably came in the 1960s. And the difference in the mid- to late-1960s, early-1970s compared to what we're doing today, heap-leach technology has made quite a lot of strides for the better. We know a lot more about what we're doing.

Today everything has to be closed. That was a mill environment, where they pulverized the material so they could get the gold out. We are just doing a fine crush. Instead of taking it down to a fine sand or a flour-type material, we're taking it down to an eighth-inch gravel. And then we're irrigating it with the dilute cyanide solution that will pull the gold into solution, and then we process it from there. However, our gold ore that we're irrigating with this cyanide solution is on a plastic membrane, so that as the solution goes through, it's collected on this plastic membrane and drains into a pond. From there, we process it through our plant. We bring the strengths in this water back up to the leachable cyanide strength, and then we send it right back up. So basically it goes onto the heap, down to the plastic, into the plastic pond, through the plant, back to the pond, up through the heap. The water we lose is for two reasons only: bringing the ore up to a moisture content that the water will pass through it and through evaporation. 267

Heap leaching is ore-specific. Some gold ores you just can't heap leach, because you have to take the material down to a flour size to liberate the gold. Here, basically, we have free gold and electrum [a gold-silver metal], and it's on the micro-fractures. So by taking it to this eighth-inch size, we are opening up enough of those fracture planes that we get a good recovery.

The other thing that dictates between a milling environment and a heap is the grade of ore—how much gold is in every ton of rock and the amount of it that you have—because a mill is much more capital intensive than a heapleach project is. You're probably talking four to five times as expensive to build. And you either need to have the sufficient grade to recover that capital quickly, or you have to have the longevity to recover it over time.

One of the things that we're concerned with is getting solution to the entire pile of ore we have there. We use cement to tie up the fines, so that we don't create blind spots in the pad. When heap leaching first began, it was just taken out there with trucks and dumped. We use conveyors and radial stackers, so that there's very little compaction on the material before we leach it. Crushing has been developed better and better, so we can crush cheaper. We can crush finer if need be. And milling has gotten better, also. It's just basically experience. We know more of what we can do with it. Well, for example, let's just say that fifteen or twenty years ago, the rule of thumb for your cyanide strength was much higher than it is today. We know how little we can actually get away with and still cost effectively leach the gold out of the ores.

The other thing is, we have roughly a six- to seven-year project here. And where the decision is made is, we get a certain recovery with the heap leach: we're going to get a higher recovery with the mill, because we're exposing more gold. But it's a difference in recovery—the mill's going to make more money than a heap, but that difference has to pay for the increased capital [i.e., the cost of the mill]. In this situation, it's not there, because we have a relatively short mine life.

The Oromonte area where we're standing is where the leach pad is going to go.<sup>3</sup> We'll be crushing the ore, and this is where we will be stacking it to leach it with cyanide. Now, the building behind me that you can see, that will be torn down, and that will be where our solution pond is. Right next to it will be our processing facility, our carbon plant, and a gold refinery. There will also be an assay laboratory there, an engineering building, and then over on this side of the valley here will be where our crushing plant is going to be. The run of mine ore will come in there, which will be nominal boulder-size materials down to fines, and then we'll crush it to approximately a one-eighth-inch-maximum size material. And then we will be filling this basin with the crushed ore where we will be leaching it with the cyanide solution. The Cord Mill was still the Merrill-Crowe system, which once you got the gold in solution, then you dropped it out on a zinc precip. Now here, we get the gold in solution, and then we run it through activated carbon in

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columns and then through electrowinning. We pull the gold out of solution that way. It's the next phase of technology.

#### Mining Technology

Historically, the Mary Mine has been an underground mine. We are doing just the opposite in open pit, heap leach. A lot has changed, you know. Engines have gotten more efficient. Engines have gotten larger. Tire technology is a big one. Fifty or sixty years ago, tires wouldn't hold the weight that we're putting on them today with the synthetics and things like that. Our trucks are the "babies" of the industry. They're 58-ton class trucks, which is the payload. The large mines in the state are using 240-ton payload trucks, so five times the size of what we have.

When I went to school, computers were just starting to come into it. We were using them as high-powered adding machines. That's basically what they are today, but ore reserves were calculated by hand. We did have calculators then, so it wasn't with a slide ruler, but years ago it was. All ore reserves are done with computers today. We take the assay information from the exploration drilling, 3-D models are created, and everything is done within the computer. Major change. We are able to model ore bodies with more information and with a whole lot less time. Computers can do it so much quicker. I'd hate to do the math calculations that are required to develop a project even this size. They were following a vein, whereas, what we've done is, mathematically, we've modeled it. We know where this vein is.

Total, this project will last about eight years. Actual mining and crushing will be between five and six years long, and then after that we will do the final leaching on the heaps to get the last bit of gold out. Then we have to rinse the heaps with fresh water to detoxify the remaining rock. And then after that, all the material that is here is re-sloped, contoured, topsoiled, and seeded.

#### Reclamation

Actually, for reclamation, this area falls into the multiple-use policy of the government agency here. The contours will change, but it is primarily used for mining, recreation, and grazing. When we finish with the mining process here, we will turn it back so that it can be used for grazing and recreation. All the buildings we put in, all the concrete we put in, will be either buried or removed. The reclamation activities, basically, the goal is to make it for future minerals exploration, for recreation, and for grazing. OK, for the grazing, we need to reduce the slopes of our waste dumps and our heap and things so that vegetation can grow on it. We do need to seed it. Recreationwise, we need to make the place accessible and also safe—in other words, 269

deny access or keep people out of places where they can hurt themselves, because, as we all know, people can do dumb things. [laughter]

When we leave, the mountain will have changes. We do have nine open pits. Hopefully, we'll have two or three more by the time it's finished, because we do have some active exploration. Of the nine open pits, the large one will definitely stay open, because it is started in year one, and it is the last one to be mined. Some of the smaller areas will be backfilled. This is actually cheaper for us, because it saves us some reclamation. There will still be required reclamation, but the amount of reclamation is less because we're containing it. The waste dumps will be regraded and seeded. The open pits will be burned. Access will be denied to make them safe for the general public when we're finished. But contours, the topography's going to change, but hopefully it will be equal or better than what it is today for multiple-use purposes.

We're going to be mining out a lot of the previous underground areas, and the one pit [at the old Drinkwater], that is our large pit. We are going to completely engulf that area. And the waste dump that is associated with it, that hasn't been seeded or reclaimed, will be reclaimed.

Another one of the assets of this project going in here . . . in order to get the supplies that we need for the mining operation, there's twenty-six miles of county dirt road that we must improve to get our heavy equipment through. This is the main thoroughfare between Fish Lake Valley and Silver Peak in the county here. So we will be maintaining this road for the next five or six years, and when we leave, the road will stay in it's improved condition. The roads will be widened. The grades will be much more favorable. These will be roads that you can drive up in a two-wheel-drive car as opposed to the four-wheel-drive vehicles we were using today. Right now, the road receives minimal maintenance by the county. We're spending about \$200,000 on that road right now, improving it.

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## EDWARD "ED" M. TOMANY: PAT CHIATOVICH'S GOLD

Edward "Ed" M. Tomany was raised in both Silver Peak and Tonopah in the 1950s and 1960s. His mother was a well-loved schoolteacher in the area, and his father was a miner who also was a boxer. He remembers every inch of the Mineral Ridge Mining District, having traveled to the mines often with his father, who told stories of earlier days. At the time of his interview, he served as the Chief Administrative Officer, Mine Inspector for the Nevada Mine Safety and Training section. Ed recalled the very moment when his circle of friends and family from the mining community endorsed his government job.

My father [Donald Andrew Tomany] and mother [Anne Banovich Tomany] met and married in Silver Peak, and they were living in Silver

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Edward "Ed" M. Tomany. (Photograph by Victoria Ford.)

Peak when I was born in Tonopah on January 25, 1945. My mom was a schoolteacher in Silver Peak in 1936 and met my father, who was mining gold at the Mary Mine and also at the mining camp of Nivloc, which is west of Silver Peak. My mom and dad lived in Nivloc. She taught school in Silver Peak, and she would haul the kids to school from Nivloc with the silver bullion on the school bus. She would drop the bullion off at the post office and take the kids on to school and teach school and then bring the kids home in the evening.

She was the janitor at the school after hours and schoolteacher during hours and then the bus driver and the armored car.

My parents met in 1935. My sister was born in 1950 in Hawthorne. Probably, they spent a good seven or eight years or more in Silver Peak, and then my mother taught in Tonopah for years and years and years. And then she taught in Goldfield and became superintendent of Esmeralda County schools. And at that time she frequented the Silver Peak, Dyer, Goldfield schools, and her best friend out there was Alberta Merritt.

My father originally was a leaser at the Mary Mine. In fact, he was one of the last leasers at the Mary Mine. And at that time in the Silver Peak-Mineral Ridge area there were a number of small operations besides the Nivloc operation and the Mary Mine operation. Of course, they had the mill in town. He mined with a number of the old-timers out there. [There was] Jimmy Gavin, the Chiatovich brothers, who were very prominent first settlers in Fish Lake Valley—Stanley and Jack and Pat and Bob—Harvey Humphrey, Ernie Shirley, Fred Del Papa.

Fred Vollmar Jr. was a very close friend of my father's. And in fact, he owned a beautiful home there in Silver Peak. It had a swimming pool in the yard. I mean, that was unheard of—a private swimming pool at a residence. Fred Vollmar was instrumental in mining throughout Nevada. A lot of people only remember highlights of Fred Vollmar being a mining promoter, but he was actively involved in the development of mines besides being a promoter.

I spent all of my time with my dad when he could take me with him, and then even after we moved to Tonopah, we would go back, and he would continue to lease. He leased at the Nivloc. He leased at the Gold Wedge. He leased at the Mary Mine. And then we prospected all of my life out there. That was his main source of income until about roughly 1956 or 1957. Then he became involved in the Del Papa-Boscovich ownership of the Ace Club. Later on he became a deputy sheriff and then was elected as the sheriff of Nye County. 271

#### **Family Friends**

The Future I know there were a lot of old family friends that are still .... The Del Papa family—Joselyn Del Papa was a schoolteacher with my mom in the Tonopah schools for thirty years. But Fred Del Papa and his family, his mom and father and brother, were raised on the Del Papa mining claims on top of Mineral Ridge at the State Bank claims. They lived at the Campenella claim and at the spring, and that's where they were raised. From the Gordon-Brodie Mine, the State Bank claims where the mining transpired was roughly one mile west of the Brodie claim. And then the Campenella was less than a half a mile north of the State Bank claim, so the Campenella is slightly north and west from the Brodie claim. Of course, Frank Del Papa lived in Tonopah. The attorney general of the state of Nevada today is Frankie Sue Del Papa. Her father was Frank.

From the time I was a kid, I would go with my father and Fred Del Papa to Mineral Ridge, faithfully, every time that my dad could sneak me in the truck back in the 1950s. I can recall being up on that mountain with Fred Del Papa, my father, George Boscovich, and Manhattan Dutch in the early 1950s on a regular basis as they tried to rediscover the gold.

The history of the Del Papa claim was ironic. Fred Del Papa's father (it was a very small, single-family operation mine) was drilling one day and doing the normal mining methods: drill, blast, and muck. Rail cars were unknown for underground. But the family operations were hand mucked. You drilled and blasted and then shoveled or mucked your cars full. To listen to Fred talk about this experience, it was that kind of gold fable that you've heard stories about. They blasted, went in to muck it up, and there was gold splattered all over the walls. And they actually had to sweep it up, shovel it up; and it was tremendously rich.

They had the last forty-eight pounds of that, which was kept by Joselyn . . . Well, Freddy kept it, from the time that his dad had discovered it, in a washtub in the basement of his house through the mid-1970s. And it was not uncommon for Fred Del Papa (he co-owned the Ace Club in Tonopah with George Boscovich) that he would bring the tub out and let you select with a pair of tweezers a piece of gold that you wanted. You didn't have to pan it or anything. You just reached in there, looked at a piece that you wanted, and you could take it out of there.

And then my dad prospected with Del Papa until the day he died. We spent every day. It was a ritual, because we maintained the Del Papa claims for Joselyn until she sold them last year, and we maintained those for her all of my life after Freddy passed away. And, of course, before Freddy passed away in 1967, we assisted him, so we were an integral part of that for all of my life.

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## Leasers

Leasers made daily wages and bonuses for the amount of work that was completed. In other words, just as today what we call contract mining and bonus operations, where you actually get paid for footage, they would get paid for footage with incremental bonuses to be up on development. What you made depended on your work. Being in a good section of the mine would be favorable, obviously. But you could get paid for development, too, and at a higher rate. There was a lot of misunderstanding in some of that contract mining where, if you received shares and values of a mine, you were obviously to benefit if you were in a rich area. But because you weren't depending on the mine and the location, you could also make above and beyond daily wages by being a good miner, being very prudent, being very good at your job, and developing above standard. So you could get paid for that extra development that you did above and beyond a normal day's salary.

## The Mary Mine

In fact, when my father was alive (he just passed away four years ago), he used to tell us where individual miners lived as we would come up the Mary Mine road. Sunshine and Moonshine Johnny and the Brodies and, of course, the Del Papa family. Freddy and my dad would name the properties and some of the episodes and incidents that happened, where the bunkhouse was. They stayed at the bunkhouses at the Mary Mine. He discussed in detail the cook shack and the bunkhouse when he was at the Oromonte. We would ask, "My God, there's not much there. How did you keep warm?" Well, they cut a lot of firewood. And he would tell about the cold winter days and no mention of the comforts of life at all. But that was history throughout the nation—not everyone owned a car and not everyone owned their own home. And the style and the progress of all of these living conditions, it's just been a dramatic change following the war.

They didn't have electricity up on top of the hill. They may have at the mine and at the bunkhouse, but they didn't when he was leasing up at the Oromonte. They didn't have power in the cook shack, and Del Papa's never did have power at their home on the Campenella claim. Wood heat and kerosene lamps.

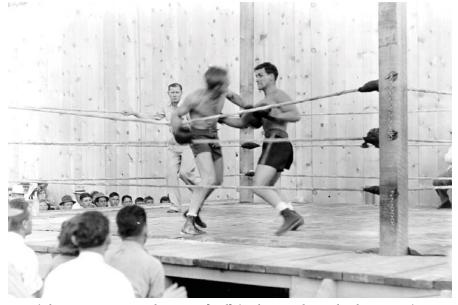
Dugouts—early on, maybe someone started to dig a tunnel and then converted it. Well, they put a face on them with a door and a window. Moonshine and Sunshine Johnny weren't alone. The Dynamite Newmans and the names . . . all of them. There were numerous places as you would drive up. It was like a tour. That was a steep grade after you left the Mary Mine to go on top to Brodie and Oromonte—that's a very steep grade, and you would pass these as you went along. 273

## Sport of Boxing

My father was an amateur boxer that was on the professional boxing card when Max Baer fought Big Ed Murphy in Silver Peak, and my mom kept the original fight poster. My dad fought a gentleman by the name of Cotton Dean, who was a local miner at Mineral Ridge. We actually have a photograph of my father fighting in the ring and the fight card to the poster.

There was a whole group of folks that their pastime was in organized boxing as we know it today, as a sport, amateur to professional levels. And Nevada has a tremendous history on boxing, early boxing that originated in the Tonopah-Silver Peak-Goldfield area. Where today we have drilling-rock competitions, well, they had boxers from the mine. They were miners, and the guys in the mine wanted them to fight the guy from that other mine, that type of thing. They were employed in a very strenuous work to begin with, so they were physically fit. My dad said that on days where he had extra time, he would walk the Nivloc road or walk the Mary Mine road. The Nivloc, I can understand that; but that's a hike on the Mary Mine road. That's not a walk: that's a hike. Vertical distance there.

Local rivalry—like today on the football rivalries across town—well, that was rivalry across the mines. And you select your boxer, and a number of these people went on to become professional boxers. Small scale, but like Big Ed Murphy. All he was, was a local miner. Fought Max Baer, my God, heavyweight champion of the world! So it isn't as if it was just a dream or a hobby. Some of these people went on to become pretty good boxers.



"My father was an amateur boxer. . . [and] fought a gentleman by the name of Cotton Dean, who was a local miner at Mineral Ridge." The Don Tomany and Cotton Dean fight, Silver Peak. (Photograph courtesy of Tasha Hall.)

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As they tell me with my dad, he was a great boxer. He taught me how to box, my brother and I. That was the kind of thing that you did growing up. He bought my brother and I boxing gloves and used to put us out on the sidewalk to practice. And it was a part of all those mining communities, like the Gans-Nelson world championship that was fought in Goldfield, Nevada.<sup>4</sup> That was brought on by the gold producers of the mines who brought that match to Goldfield. So in some fashion, as you would look at gaming and tourism today in this state, that was how it was. It was just a different commodity.

Mining in the Family

The fact that my dad was employed [in mining] . . . the excitement to me was the fact that we went out and actually participated in this thing, which was work for him. Of course, it was work for us. I was just a kid, but I guess it was the adventure of being unique—that I pushed an ore car, and I filled an ore car, and it was hard work, but I accomplished something. I learned to fill an ore car and dump one, but that was exciting. There wasn't anything else when I was growing up, outside of organized sports at school. There weren't recreational activities after school. There wasn't TV. There weren't all these things that you have today. And that's where my energy was channeled.

When I was a kid everything was rail. We pushed ore carts, and we loaded ore carts with shovels, and life progressed. We went on to what we called air tuggers. And, of course, in the deep shafts you had a hoist in the winze and things. And then you went on to a larger operation, if you were fortunate. You had [model] Twelve B muckers, compressed-air-powered mucking machines.

Then in Nevada we saw this transition, which to me came about in the 1970s when I was first introduced to rubber-tire operations underground, where we made the hole larger so we could bring mechanized equipment in to do the work for you. That came about before then in many places. But I was one that stayed away from that mechanization, because I was accustomed to the same old methods or gravity ore chutes. We loaded them and let gravity fill the car for us. And all those things that we did with rail and rail cars and electric motors and air motors and all of those things. And the same with the drill.

## Mine Safety

When they [Father and his friends] would all visit together, everyone's kidding each other about what they used to do and how they used to do it. Numerous times they referred to having near accidents, where they had premature detonations of the blast when they were drilling and shooting, or

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where they drilled into a missed hole. In one mine accident that they used to kid my father about later on, they thought that would be his last day mining. That was at the B and B Quicksilver in Fish Lake, where he was nearly killed in a cave-in. The slab just pushed him to the side instead of crushing him, and it had blocked the mine for a considerable time.

When he took me underground, he always told my mom that I would wait in the truck, but that wasn't the case. And, you know, from early on I was always told what I should be careful of, and where I should sit, and what I could and couldn't do. And there were times when I was actually left in the stope, and they would work.

Accidents were a part of life back then, and as each year went by, when there was a mine accident, everybody was familiar with what probably happened. When I was in high school, one of my classmates, Jerry Sickles's father was killed in the Mohawk cave-in in 1961, and he's entombed there with two other miners. They were never found. They couldn't get them out. You always hear "a cave-in," but there's more to a cave-in than a simple collapse of the ground. As we learn today in courses: was the ground not properly supported? Those were conscious things that we did when I was a kid, and I was with him. We always checked ground support. We always had to be careful of where we entered and where we were working and what we disturbed—simply from ground conditions. So that was inherently, as it is today, a part of mining.

I've gone on to work in the area of mining safety. As chief administrative officer, the Mine Safety and Training section oversees mine inspections for the state of Nevada. Our agency was created by the legislature in the state of Nevada in 1909. This state undertook that process for the health and safety of their miners in 1909, something that never came about [federally] until the Congressional Mine Act of 1977. This is now the Mine Safety and Training section. It was created by the legislature as the Division of Mine Inspection. And it was the Division of Mine Inspection until reorganized by state government about four years ago, when they did our name change and we were placed under the Department of Business and Industry. But prior to that, we were a division by itself, and the inspector of mines was an elected position in this state up until the . . . . I want to tell you it was in the 1960s. It could have been 1970s.

I went to work in 1991 [as a state mine inspector], and one of my father's best friends in later life was Leonard Traynor, the deputy mine inspector at the time that Mervin Gallagher was the administrator of this division. And I'll never forget when my dad came to my office in Tonopah. There's a field office in Tonopah which still exists. And he came to my office with two of his best friends. At that time it was Norman Combs and Dennis Hill, very prominent. Dennis Hill was the Democratic party chairman back in the 1970s or 1980s but was very active and instrumental in the development of mining properties in this state.

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They came to my office and looked at me and said, "Well, now, we want to tell you how this works. Leonard was one of us, just like you were, and he helped us get our mines in shape and producing, and we don't expect anything less from you."

The message was even though I'm regulatory, I'm still in the group here. I have a job, and even though I envision the job to be other things demanded by law—which we do and will always do, and they respect that that I also have an obligation to assist. Specifically, in the law, besides the fact that we will inspect annually for the health and safety of mining in the state of Nevada, it states that we will provide technical assistance and consultations to see that operations work. So that's an easy mix for me.

There's a lot of work, and our industry is growing. This is a big industry today, and technology has grown. There are some of these things today that we have to deal with that didn't have to be dealt with then, environmentally. And I'm not saying that's not a good issue. I'm just saying that we have these other concerns today that were concerns then, but they weren't under any magnifying glass as they are today. And I look at it in mining as being an educational thing only. If mining were to educate their people and the general populace as to what they really do and how they do that . . . Yet, in my father's day they had to take care of them in their own fashion. It was a local issue—you didn't pollute your water source. You didn't destroy history just for the mine.

## Grandfather's Silicosis

My mother was not happy with that [when my father took me down in the mines]. Her father died of miner's consumption. My Grandfather Mike Banovich moved here from Yugoslavia because of the unrest. My grandfather moved to Tonopah around World War I, 1917 to 1919, with other fellow countrymen. Nevada is littered throughout its communities with Slavic miners, and many of those are in Tonopah. They have their own community. Ely also has a large number of Yugoslavian-Czechoslovakian families.

He came over for a year or two without the family to get work and ended up in Tonopah working in the mines. He brought the family over, with the exception of my aunt who has passed away. I think my mom was born in Tonopah. But he only lived there a couple of years. He contracted miner's consumption, silica dust, and died. He died very, very young—very early. And my grandmother [Miryna Banovich] moved the family back to Yugoslavia. They were back there less than a year when my Uncle Bill said that they were moving back to Tonopah, Nevada. She sold everything they had, and they came back to Tonopah.

I can recall my mom always saying that she wouldn't have the rest of her family die in the mines. I didn't understand that as well then as I do today. By the time my father was mining, they changed mining practices, too. One 277

of the biggest engineering changes was the use of water for drilling. That's where the majority of the problems were centered. The largest, most devastating source of the silica dust consumption for miners was drilling dry referred to as drilling dry without the use of water to moisten and settle the dust and the silica. Wet machines, referred to as wet machines. But for many, many years there was nothing but dry machines. Then later, there were dry machines being used, but you didn't want to get caught with a dry machine. If you got caught by the mine inspector with a dry machine, as you would today, he would turn it off. It would be removed from the mine. Converted or removed for health reasons.

That's [miners' consumption or silicosis] been a very close issue for me when I do the safety classes. I use that [example of my grandfather] when we talk about it, because it's an issue that I can reflect to directly—how it affected my family. My mom and her sister and my uncles were raised without a father because of a health issue involving crystalline silica dust in the mines.

But I do have to put it in perspective: while that was a danger then and still is a danger today, the technology and the manner of enforcement has lessened the danger that another family would suffer the consequence that many, many families did. Our family wasn't alone. I mean, the graveyards in Nevada, as I tell the folks in our training sessions, is just .... One needs only to walk through the graveyards at Goldfield, Silver City, Virginia City, Tonopah, and the likes to see the number of miners who died in this occupation—at very, very young ages.

And there were some mining districts more prone to that: Tonopah being one, and Delamar in eastern Nevada. They had extremely high incidences of death by silicosis, dust consumption. In fact, this state created a benefits program for those families or miners who have suffered health effects in their occupation of silicosis.

My grandmother had a garden and sold products right out of her garden [after my grandfather died]. It was a large garden in Tonopah, my God, on top of the rock pile up there. She had goats and sold goat's milk and made goat's cheese. My Uncle Bill and my Uncle Dave both got jobs early on as kids—pumping gas, chauffeuring, driving haul trucks and cars. Everybody [had to work], the whole family. Barter and trade and get a job. But there were many families that were in that same . . . . That's an unfortunate part of history.

#### Never-ending Search

[There's] an old tale about one man [who] spent his life looking for gold up on that hill, and that evolved from Pat Chiatovich, who is now dead. John Brodie and Pat discovered a very rich gold ledge. I can truthfully tell you that we spent thirty years with Pat, Freddy, George Boscovich, Manhattan Dutch—all of us together, singly, and collectively—but we could never find that gold again. Pat Chiatovich found it when he was employed by John

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Brodie, and because of L-208 and because of the lease structures then, he didn't announce it and didn't want it developed until it was a better [financial] climate. And then he never could find it again. He spent all of his life looking for it. Pat Chiatovich, he expended every bit of time he had, on off periods of time, with his family and friends, all looking for it. And he was hiking between the Brodie mine and the Campenella property when he found it. In that small of an area. We looked all my life. That was a ritual similar to the sunken treasure thing, you know.

And, of course, it reached a point where we all . . . . I say we, but I heard many conversations in later years where my dad and George and Freddy would tease Pat about, "You had a dream." But they knew that it was not a dream, because they participated in this same search. They had seen the ore. They had actually seen the ore that Pat had brought back. So it wasn't as if it didn't exist. It existed, and it still exists somewhere today.

So there's a sadness in my thoughts, because I saw Pat live every day to do that, to try to find that again, along with many, many of his friends. Well, he just didn't find it. And, obviously, in my mind I've chosen to think that if they ever make this large, rich discovery of gold at Mineral Ridge, that was Pat Chiatovich's. I think that would be the closing chapter of this whole thing. And the Del Papa family and the gold in the washtub . . . . So I witnessed that and saw that and worked for them in that mine looking to find more. It's been a nice hill for me.

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## CONCLUSION

Cornucopia Resources Ltd., a Canadian mining corporation, contracted a feasibility study for its Mineral Ridge property with plans to begin mining in 1997 at the site of the historic Mary and Drinkwater mines where more than a half million ounces of gold was produced from underground operations up until 1942. This information appeared in a publication by the Nevada Bureau of Mines in 1995, and MRRI did indeed begin operations late in 1996. However, MRRI filed bankruptcy and changed hands several times in the process. First, in 1998 Vista Gold took over operations, but in November of 2000 Golden Phoenix Minerals, a local company with headquarters in Reno, acquired the Mineral Ridge property.

Golden Phoenix Minerals is currently working to locate funding resources to post the \$3.7 million bond that must be in place before opening the mine. Once again, the Mineral Ridge operation is searching for a few gamblers to bet on another heyday. Thus Silver Peak begins a new century, not as a ghost town—never a ghost town—but as a mining town still in the game, still holding a good hand and still drawing the interest of outsiders who will work in partnership with local residents.

## Notes

## 280 1. Also referred to as miner's consumption, thus "the con."

The Future 2. Ben Viljoen was elected Esmeralda County Commissioner in 1996.

3. Part of this oral history interview was recorded on videotape at the site of future operations.

4. Joe Gans won the World Lightweight Championship title after a grueling fortytwo rounds in the Gans-Nelson fight on 3 September 1906, in Goldfield. That was one of the first fights staged by Tex Rickard to sell Goldfield mining stock. Charles Samuels, *The Magnificent Rube: The Life and Gaudy Times of Tex Rickard* (New York: McGraw-Hill, 1957), 97-126.

## Glossary

Unless noted otherwise, all definitions are from the American Geological Institute's Glossary of Geology<sup>1</sup> or from Stanley Paher's Nevada Ghost Towns and Mining Camps.<sup>2</sup>

**adit**, *n*. A horizontal passage from the surface into a mine, sometimes called a tunnel.

alluvial, *adj*. Deposited by a stream or running water.

**amalgam**, *n*. A naturally occurring alloy of silver with mercury; a general term for alloys of mercury with one or more of the well-known metals, especially an alloy of mercury with gold, containing 40 to 60 percent gold, and obtained from the plates in a mill treating gold ore.

**arrastra**, *n*. Large, bowl-shaped devices in which Hispanic miners ground ore with the aid of slow-circling mules.<sup>3</sup>

**assay,** v. To analyze the proportions of metals in an ore; to test an ore or mineral for composition, purity, weight, or other properties of commercial interest.

**backwall**, *n*. Headwall or a steep slope at the head of a valley.

**ball mill,** *n*. A rotating horizontal cylinder with a diameter almost equal to the length supported by a frame or shaft in which materials are ground using grinding media such as iron or steel balls.

**barite,** *n*. A white, yellow, or colorless orthorhombic mineral in which strontium and calcium are often present.

**blasting**, *n*. An explosion of dynamite; the act of blowing up or moving with an explosive.

**bonanza**, *n*. A miner's term for a rich body of ore or a rich part of a deposit; a mine is "in bonanza" when it is operating profitably.

**borrasca,** *n*. Term referring to a mine with no rich ore.

**282 claim,** *n*. In mining law, a portion of public land on which an individual may have mining rights.

Glossary

**claim jumping**, *n*. Taking over mining property after it has been staked by someone else, usually before the claim is recorded.

**collar,** *n*. The mouth or upper end of a mine shaft.

**concentrates,** *n*. The valuable fraction of an ore that is left after worthless material is removed in processing.

**crosscut**, *n*. A small passageway that may be driven at an angle to the main entry of a mine to connect it with a parallel entry or an air course. A level driven across the course of a vein or across the general direction of the workings; thus a mine opening that intersects a vein or ore-bearing structure at an angle.

**cut and fill,** *n*. The excavating of material in one place and the depositing of it as compacted fill in an adjacent place, as in stope mining.

**cyanide process,** *n*. A process for the extraction of gold from finely crushed ores, concentrates, and tailings by means of cyanide potassium. The gold is dissolved by the solution and subsequently deposited upon metallic zinc or by other means.

**district**, *n*. In the states and territories west of the Missouri (prior to 1880), a vaguely bounded and temporary division and organization made by the inhabitants of a mining region.

doré, n. Gold and silver bullion that remains after the lead has been oxidized and skimmed off.<sup>4</sup>

**drift,** n. A horizontal or nearly horizontal underground opening driven along a vein.

**dump,** *n*. A pile or heap of waste rock material or other non-ore refuse near a mine.

**fault,** *n*. A fracture or a zone of fractures along which there has been displacement of the sides relative to one another parallel to the fracture.

**float,** n. A general term for isolated, displaced fragments of a rock, especially on a hillside below an outcropping ledge or vein.

flotation, n. The method of mineral separation in which a froth created in water by a variety of reagents floats some finely crushed minerals, whereas other minerals sink.

**fluorspar**, *n*. Fluorite. A transparent to translucent mineral found in many different colors, it occurs in veins, usually as a gangue mineral associated with lead, tin, and zinc ores.

**footwall,** *n*. The underlying side of a fault, orebody, or mine working; especially the wall rock beneath an inclined vein or fault.

**flux,** *n*. A substance that promotes the fusing of minerals or metals or prevents the formation of oxides.

gallows frame, n. The frame supporting a pulley over which the hoisting rope passes.

**gangue,** n. The valueless rock or mineral aggregates in an ore; that part of an ore that is not economically desirable but cannot be avoided in mining. It is separated from the ore minerals during concentration.

**hanging wall**, *n*. The overlying side of an orebody, fault, or mine working; especially the wall rock above an inclined vein or fault.

**hard rock**, *n*. A term used loosely for igneous or metamorphic rock, as distinguished from sedimentary rock. A rock that requires drilling and blasting for its economical removal.

**headframe**, *n*. The steel or timber frame at the top of a shaft, which carries the sheave or pulley for the hoisting rope and serves various other purposes.

high-grade, *adj*. Said of an ore with a relatively high ore-mineral content.

high-grading, n. Larceny of valuable ore or mineral specimens by employees in a mine.

jewelry rock, n. Rich ore.

**lagging,** *n*. Heavy planks or timbers used to support the roof of a mine or for the floors of working places and for the accumulation of rock and earth in a stope.

**leaching**, *n*. The extraction of soluble metals or salts from an ore by means of slowly percolating solutions; e.g., the separation of gold by treatment with a cyanide solution.

**ledge**, *n*. A narrow shelf or projection of rock, much longer than wide, formed on a rock wall or cliff face. A rocky outcrop; solid rock. A quarry exposure or natural outcrop of a mineral deposit.

**lens**, *n*. A geologic deposit bounded by converging surfaces (at least one of which is curved), thick in the middle and thinning out toward the edges, resembling a convex lens.

**level,** *n*. Mines are customarily worked from shafts through horizontal passages or drifts called levels. These are commonly spaced at regular intervals in depth and are either numbered from the surface in regular order or designated by their actual elevation below the top of the shaft.

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**lifters,** *n*. Refers to a set of holes drilled for dynamite blasting in a mine which, when exploded, lifts the rock.

lode, *n*. A well-defined occurrence of valuable mineral-bearing material.

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**mill,** *n*. Reducing plant where ore is concentrated and/or metals recovered.

**muck**, *v*. To load broken rock by hand or machine and remove it following a blast.

**ore,** *n*. The naturally occurring material from which a mineral or minerals of economic value can be extracted.

**orebody**, *n*. A continuous, well-defined mass of material of sufficient ore content to make extraction economically feasible.

ore shoot, *n*. A large and usually rich aggregation of mineral in a vein.

**outcrop**, *n*. The part of a rock formation that appears at the surface of the ground.

**overburden**, *n*. Barren rock material, either loose or consolidated, overlying a mineral deposit.

**patent**, *n*. A document which conveys title to the ground, and no further assessment work needs to be done.

**perlite,** *n*. A volcanic glass having the composition of rhyolite, a perlitic texture, and a generally higher water content than obsidian.

**pilar,** *n*. A term used in the southwest United States for a large pillarlike or projecting rock.

**porphyry,** *n*. An igneous rock of any composition that contains phenocrysts in a fine-grained groundmass; a porphyritic igneous rock.

prill, *n*. Ammonium nitrate in beads used as an explosive in mining.

**pulp,** *n*. A mixture of ground ore and water capable of flowing through suitably graded channels as a fluid.

**quartz,** *n*. Crystalline silica, it forms a major proportion of most sands, and has a widespread distribution in igneous, metamorphic, and sedimentary rocks.

**raise,** *n*. A mine shaft driven upward from a lower to a higher level.

**run**, *n*. A flat, irregular, ribbonlike orebody following the stratification of the host rock.

scheelite, *n*. A yellow-white or brown tetragonal mineral associated with quartz, it is an ore of tungsten.

shaft, *n*. A vertical or inclined excavation through which a mine is worked.

**skip**, *n*. A large hoisting bucket which slides between guides in a shaft, the bail usually connecting at or near the bottom of the bucket so that it may be automatically dumped at the surface. An open iron vehicle or car on four wheels running on rails and used especially on inclines or in inclined shafts.

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skip tender, *n*. The person who operates the skip.

**slimes,** *n*. Ore reduced to a very fine powder and held in suspension in water so as to form a kind of thin ore mud.

sluice, *n*. A conduit or passage for carrying off surplus water, often at high velocity.

slurry, *n*. A highly fluid mixture of water and finely divided material.

**square set,** n. A set of timbers composed of cap, girt, and post. These members meet to form a solid 90-degree angle. They are so framed at the intersection as to form a compression joint, and join with three other similar sets. This system of timbering can be adapted to large or irregular ore bodies.

**stamp mill,** *n*. An apparatus in which rock is crushed by descending pestles or stamps operated by water, steam, or electric power. Also, the building containing the machinery.

**stope,** *n*. An underground excavation formed by the extraction of ore.

**stringer**, *n*. A mineral veinlet or filament, usually one of a number, occurring in a discontinuous subparallel pattern in host rock.

**sump**, *n*. A pool of water in a cave, the outlet of which lies beneath its surface.

**tailings,** *n*. Those portions of washed or milled ore that are regarded as too poor to be treated further, as distinguished from the concentrates or material of value.

tram, v. To haul or push cars about in a mine.

**tunnel**, *n*. Strictly speaking, a passage in a mine that is open to the surface at both ends. It is often used loosely as a synonym for adit or drift.

**vein,** *n*. A zone or belt of mineralized rock lying within boundaries clearly separating it from neighboring rock.

**whim,** *n*. A large capstan or vertical drum turned by horsepower for raising ore from a mine.

winze, n. A subsidiary shaft which starts underground. It is usually a connection between two levels.

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